

中英科學合作館  
REPORT OF THE SECOND  
AND THIRD YEAR'S  
WORKING OF THE  
SINO-BRITISH SCIENCE  
CO-OPERATION BUREAU.

---

---

BRITISH COUNCIL CULTURAL  
SCIENTIFIC OFFICE IN CHINA—FEB., 1946

---

---

By  
DR. JOSEPH NEEDHAM, F.R.S.  
BRITISH EMBASSY, CHUNGKING.



## CONTENTS

|                                                                                                                                                                 | Page |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| INTRODUCTION .. .. .                                                                                                                                            | 1    |
| (1) Maintenance of Contact .. .. .                                                                                                                              | 1    |
| (2) Supply of Scientific Material to the Chinese .. .. .                                                                                                        | 3    |
| (3) Facilitation of the output of Scientific Literature from China .. .. .                                                                                      | 8    |
| (4) Provision of Advice to Chinese Scientific and Technical Organisations .. .. .                                                                               | 12   |
| (5) Assistance with the Exchange of Scientific Personnel .. .. .                                                                                                | 13   |
| SCIENTIFIC STAFF .. .. .                                                                                                                                        | 16   |
| ADMINISTRATIVE STAFF .. .. .                                                                                                                                    | 16   |
| LIST I                                                                                                                                                          |      |
| Chinese Scientific and Technical Institutions visited by the British Scientific Representatives.. .. .                                                          | 20   |
| LIST II                                                                                                                                                         |      |
| Scientific and Technical Books transmitted to Chinese Institutions (position at the end of December, 1945) .. .. .                                              | 24   |
| LIST III                                                                                                                                                        |      |
| British Learned and Technical Journals sent to Chungking in Microfilm Form .. .. .                                                                              | 29   |
| LIST IV                                                                                                                                                         |      |
| British Learned and Technical Journals sent to Chungking for distribution in actual copies .. .. .                                                              | 32   |
| LIST V                                                                                                                                                          |      |
| Chinese Scientific and Technical Institutions for which equipment, apparatus and reagents have been obtained from India in the Science Supplies Service .. .. . | 36   |
| LIST VI                                                                                                                                                         |      |
| Original Papers by Chinese Scientists and others transmitted for publication in the West .. .. .                                                                | 40   |
| LIST VII                                                                                                                                                        |      |
| Chinese Scientific and Learned Journals transmitted in actual copies to the West .. .. .                                                                        | 48   |
| LIST VIII                                                                                                                                                       |      |
| Names of Scientific Personnel proceeding to the West for periods of Research or Advanced Study .. .. .                                                          | 50   |
| ABBREVIATIONS USED .. .. .                                                                                                                                      | 52   |

## Abbreviations Used

|      |                                                                   |
|------|-------------------------------------------------------------------|
| AMA  | Army Medical Administration                                       |
| AOA  | Army Ordnance Administration                                      |
| BRCS | British Red Cross Society                                         |
| CIC  | Chinese Industrial Cooperatives                                   |
| CMS  | Church Missionary Society                                         |
| FAU  | Friends' Ambulance Unit                                           |
| MSS  | Manuscripts                                                       |
| NARB | National Agricultural Research Bureau                             |
| NE   | Northeast                                                         |
| NHA  | National Health Administration                                    |
| NIRB | National Industrial Research Bureau                               |
| NLP  | Ministry of Agriculture                                           |
| NRC  | National Resources Commission of the Ministry of Economic Affairs |
| NW   | Northwest                                                         |
| RAF  | Royal Air Force                                                   |
| SE   | Southeast                                                         |
| SW   | Southwest                                                         |

## INTRODUCTION

IN the First Year's Report of this office, covering the period from Feb. 1943 to Feb. 1944, some account was given of the circumstances which led to the setting up of machinery for liaison between Chinese and Western, especially British, science and technology, during the last three years of World War II. The aim of the Sino-British Science Cooperation Office was, from the first, the breaking of the Japanese blockade round Free China by the maintenance of scientific and technical relations. With the exception of the fragile line of communications across Sinkiang, the only link between China and the West was the famous air line across the "hump," into which the United States Air Force, and later the Royal Air Force, put such efforts—this, though tenuous, never broke.

In the previous report a schematic representation was given of the various ways in which this maintenance of scientific contact was planned and carried out. While it need not be reproduced here, its essence may be repeated in a condensed form. Its five keynotes were:

- (1) Maintenance of Contact
- (2) Supply of scientific materials to the Chinese
- (3) Facilitation of the Output of scientific literature from China
- (4) Provision of Advice to Chinese scientific and technical Organisations
- (5) Assistance with the Exchange of scientific Personnel

We may take up these activities in this order.

### (1) Maintenance of Contact

In spite of all difficulties, considerable success has been achieved in maintaining contact between all kinds of scientific and technical institutions (governmental and otherwise), and individuals, in the two countries, including the exchange of information, specimens, cultures, seeds, etc. The arrangement of special research services such as the preparation of thin rock-sections, chemical analyses, map printing, and the like, also comes under this head. Diplomatic means were available for the transmission of selected scientific and technological correspondence.

In the former report a list of the principal interchanges of scientific information and material eastbound and westbound was given running to about 100 items. It included typewritten and mimeographed memoranda and monographs, small quantities of chemical and other specimens, reprints in all branches of science and technology, official government reports, geological and other maps, arrangements concerning exhibitions of scientific work both in China and in England, cultures of bacteria, industrial

moulds and food yeasts, specimens of plants and animals for identification, close collaborative work in specific questions such as naturally-occurring insecticidal plants and crop rubbers, samples of toxoids, sera, bacteriological peptone and agar, engineering blueprints and drawings, and a thousand and one other things. The service has indeed increased to such an extent during the past two years, with the increase in number of the scientific staff of the office, that it would now be a prohibitive labour to compile a detailed list of all the interchanges which have been accomplished.

At the time when the First Year's Report was written, the Office was wholly associated with, as it was fully financed by, the British Council. War exigency, however, necessitated closer relations between war science and technology in the two countries, and machinery was therefore set up whereby the Office was associated also with a specially created Chinese office in the Ministry of Production. Corresponding to Mr. J. G. Crowther in the British Council's Science Department, therefore, we were able to rely upon the help of Col. H. S. Briggs, and later Mr. H. L. Verry, in the Ministry of Production. A channel was thus created for the transmission of information in war science and technology, and working closely with the Military, Air, and Naval Attachés at the Embassy in Chungking, we established and preserved excellent relations with the Director of the Chinese Army Ordnance Administration, General Yu Ta-Wei; the Acting Director of the Chinese Air Force Research Bureau, Col. Wang Tsu; and the Chinese Surgeon-General, General Lu Chih-Teh (succeeded by Gen. Hsu Hsi-Ling and later by Gen. Robert Lim).

It was realised from the first that in order to acquire a personal acquaintance with the working conditions of Chinese science and technology, the staff of the office must be prepared to spend a considerable part of the time on tour. Under wartime conditions extensive travel in China was not without its arduous, and even dangerous, aspects, but nevertheless a series of journeys by road of over 25,000 km. in all was successfully accomplished. In a later section the details of these journeys will be briefly described.

In China as much, if not more, than anywhere else, it is impossible to judge from hearsay. One must actually visit the men at the bench and in the field in order to appreciate the varied success of their efforts, and to understand the almost indescribable difficulties under which they have had to work. In the first year 91 Chinese scientific and technological institutions were visited; in the second and third years 205, making a total of 296. The details will be found in List I. In the course of this work 10 out of the classical 18 provinces of China were visited.

The records of these three hundred odd visits will be, it is expected, of great value to those scientific men who staff the office in future years. Reference may also be made to a register of

Chinese scientists and technologists which has been carefully kept from the beginning; it contains the correct Chinese characters of a man's name, variants of romanisation, his "hao," the posts he has held, and the scientific laboratories in which he has worked in other countries. Our Chinese friends have often jokingly said that it could be the basis of a "Who's Who" of Chinese Science. It is certainly of inestimable value to us.

## (2) Supply of Scientific Materials to the Chinese

The presentation of British scientific and technical books to Chinese institutions to replace those lost during the war or destroyed by the enemy has been, from the outset, a leading aspect of British Council activity.

By the end of the first year, owing to the extreme difficulties of wartime transportation, whether by sea to India or by air thenceforward, we were only able to record the presentation of 289 volumes. It is good now to be able to report that no fewer than 6775 volumes have either been presented or are actually on the way. The details will be found in List II.

Taking the average cost of a scientific book at 20/- (for though there are some costing only 3/- or 7/6 there are many costing 105/- or more) it is clear that between £6000 and £7000 has been spent, amounting to some tens of millions of \$ CN at prevailing exchange rates. This is exclusive, moreover, of all transportation charges. One cannot but feel that this has rendered a real contribution to keeping the flame of science burning during the dreadful war years in Free China.

The number of books received by any given institution shown in List II is of course no indication of its relative importance. It is more an indication of relative need, since some organisations evacuated to remote villages where there were no books at all, while others established themselves in centres such as Chengtu where there was an ancient cultural tradition and comparatively large libraries of books both in Chinese and Western languages. But even this conclusion would not be correct, since the furnishing of our office with lists of books and monographs desired varied not only according to need but also according to the modesty, often excessive, of the various Chinese scholars.

Nevertheless, in looking back over the past three years and weighing up all that either we, or the RAF pilots, or the British Council's Books Department in London, were able to do, one feels that the results were very small and inadequate when compared with the vast needs of all China. Only a month or two before writing this, I was the guest of Honan University, not then in Honan, but existing in caves and old temples north of the Wei Valley near Baochi in Shensi. This University has now not one single scientific or technical book left, all having been burnt by the Japanese at one point on its numerous migrations—and this although the faculty is one of the best groups of scholars I have

met in China. What help could be adequate to cope with such devastation—certainly as great as that which has taken place in Europe?

Moreover, Chinese scholars appreciate that the book program has not been carried out entirely without some sacrifice in England. They are aware of the destruction of millions of volumes in publishers' stacks in one single incendiary air-raid on London. Just as I was writing these words I received a letter from Dr. Shen Tung, one of China's foremost specialists in nutritional biochemistry. "Mr. S. H. Chuang" he says "wrote to me recently from England. Mr. Chuang has been greatly impressed by the atmosphere of the English Universities in the difficult time of war. He told me it was very difficult to get books in Bristol and in London. He was quite unable to find an Oxford Dictionary for himself. This fact moves me very much, and I wish to express our gratitude at receiving so many books from the Sino-British Science Cooperation Office. We shall show our appreciation by making the best service of the books we have received from you." Similarly, Dr. Li An-che, the eminent anthropologist at Chengtu, writes "The books which we have just received are of paramount importance to us. It is impossible for me to express adequately our gratitude to you for all the help which you and your office have rendered us. Our material help is already great enough, but the sort of inspiration and encouragement derived from your cooperation office is even greater."

The supply of British scientific and technical books to Chinese scientific institutions has been by no means the only service which the office has been able to render in the field of scientific literature. Scientific and technical periodicals have come as well.

At the time of the writing of the previous report the difficulties of transportation made it practically impossible to convey to China any appreciable number of actual copies of periodicals. I used to sit at my desk cutting up the one precious copy of *Nature* to send clippings out to those scientists whom the articles and letters most concerned. The Council in London, however, pursued a very active policy of having the leading journals microfilmed by the Aslib Microfilm Institute, and sending them out in six positive copies. Here in Chungking these were turned over to what was then known as the International Cultural Service of China, a joint American-British-Chinese organisation which maintained a central microfilm library, arranged for the importation and local manufacture of microfilm readers and viewers, and circulated the microfilms (in spite of unheard-of difficulties of transport and communications) to a number of specially organised centres. By the end of the war the number of these had reached about 100, or 250 if hand-viewers be included.

When the previous report was written, 38 British journals were reaching China in this way from London, plus 9 British

medical ones supplied by the American Bureau of Medical Aid to China. At the present time no less than 167 British scientific technical, and medical journals (see List III) are reaching China in microfilm form. A debt of gratitude is owing not only to the Council and the Aslib Institute, but also to the publishers who willingly consented to waive all copyright requirements in the face of wartime emergency.

A notable feature of the microfilm program was the energetic development by the Chinese of what came to be called "microfilm extension services." A group of scientists would select from the microfilms articles or papers which they thought especially worthy of wider dissemination, and have them typed for mimeographing or printing. The Natural Science Society of China produced in this way a journal *Articles and Abstracts selected from Microfilms*, of which at least 14 issues have appeared. We were happy to be able to help on this work by a substantial financial grant. Similarly the International Cultural Service of China produced *Science Service*, of which about 10 issues have appeared. Another periodical of the same kind by the same organisation was *Selected Reviews of Current Literature*. A committee representing several local industrial firms (the Chunghua Industrial Chemistry Research Institute, the Tienyuen Chemical Works, and the Tienchu Weiching Mfg. Co.) produced *Industrial Chemistry: Articles Selected from Microfilm*. This has run to 3 volumes of 10 issues each. All these have done good service, and years from now will be interesting exhibits in any collection illustrating the Chinese war effort.

Naturally no one in China enjoyed using microfilms. Electric power was often lacking or of unduly low voltage, and the difficulties of wartime made it impossible to construct reading machines of the highest quality at this end. When lenses and bulbs were lost or broken many months had to elapse before replacements arrived. A great deal of the criticism of the microfilm program, however, by Westerners and Chinese alike, stemmed from a failure to recognise its true purpose. It was not intended to supplant books, for it is too exhausting to read any book on microfilm. It was not intended for aid in the teaching of students. What it was good for, and what it did help, was scientific and technological research, in which a man only needs to read the contents table and perhaps one or two papers in any given issue of a journal. We consider that its purpose was therefore fully achieved. With the conclusion of the war it will shortly come to an end, apart from microfilm copies of specially requested articles or rare manuscripts.

Then at the beginning of the period under review, and especially after the establishment of the RAF air transport service from India, the number of actual British journals arriving in Chungking began to increase at a steady rate. We now receive some 188 journals regularly, ranging in number of copies from 1 to 75,

though mostly from 6 to 12. These are allocated to the various Chinese scientific and technical institutions and despatched with the aid of a special staff. Current copies are available for readers in the commonroom of the House, (1, Victory Village, Liangfulu, Chungking). This service is now passing through a difficult time in view of the return of the exiled institutions to their original homes and the consequent danger of loss of consignments. The names of the journals are shown in List IV. It is expected that this service will continue until such time as the normal channels, through which Chinese organisations can place subscriptions and receive periodicals, are again completely open.

A very serious problem is created by the loss of long runs of bound volumes of scientific periodicals. Faced with the destruction of so many sets both in Europe and China, I was shocked to find when in England last winter that there were probably not more than a dozen complete sets of an important periodical such as the Journal of the Chemical Society on the market. This problem cannot be solved merely by appeals to individual scientists to give away or sell their own sets. The only solution is the lithographic reproduction of the sets by a body such as the United Nations Educational, Scientific and Cultural Organisation.

Sometimes, however, by good fortune, we have been able to fill serious gaps. Only a few days before this was written, we received a letter from the Director of the Physics Institute of Academia Sinica saying, "The sets of volumes of the Philosophical Magazine and the Proceedings of the Physical Society which we have received from you almost exactly cover the losses in these journals which we sustained when we had to evacuate from Kuangsi to Szechuan."

As already mentioned, many thousands of individual reprints have passed through the office in both directions during the past two years.

Besides books and journals, a scientist needs the tools of his trade. Since the industrialised portions of China had been the first to fall into the hands of the invader, it followed that the laboratories set up among the mists and mountains of the west were seriously starved of all replacements of apparatus and chemical reagents. As stated in the previous report, therefore, the office organised an Emergency Scientific Supplies Service which should act as a substitute for normal buying channels until the end of the war.

Some £60,000 sterling was made available by the British Council for this purpose, and it is good to be able to report that no less than 333 orders from Chinese scientific and technological institutions were received and attended to during the three years. These are drawn up in List V. Not all of what was asked for in any given case, of course, could be provided, but enough came in, at any rate, to make a considerable contribution towards the maintenance of research (much of which was, as in England,

directed to war problems). Of the 333 orders standing at the end of 1945 the proportions work out as follows:—

|                                          |     |
|------------------------------------------|-----|
| University scientific laboratories       | 148 |
| National Academy scientific laboratories | 61  |
| Government scientific laboratories       | 55  |
| Government technological laboratories    | 37  |
| Cooperative technological laboratories   | 19  |
| Private technological laboratories       | 13  |

Some of these orders had, unfortunately, to be suspended after the isolation of the southeast following the Japanese push into Kuangsi in the autumn of 1944.

One may clothe the dry bones of such a recital by a few specific memories, such as delivering large tubes of the rare gases at the Chinghua University Radio Research Institute; or driving to the Peiping Academy's retreat near the famous Taoist temple of Heilongtang with several substantial cases of optical glass, to help them in their courageous program of manufacturing microscopes in the Chinese hinterland. A cathode-ray oscilloscope gladdened the hearts of the excellent physicists in Kunming, and a few grams of colchicine made all the difference to life at the Szechuan Provincial Agricultural Experiment Station. A consignment of rubber tubing arrived at a University in Fukien just at the moment when all research was coming to a stop because of the perishing of their previous stock. Biological and bacteriological stains have been flown by plane to Lanchow, to Sian and to Fukien, places the most remote from Chungking. Electric motors in crates jolted over the road from Chungking to Chengtu to help the excellent work going on in the Chinese Air Force Experiment Station there. A first-rate binocular dissecting microscope kept a first-rate experimental embryologist fully at work. These things are good to look back upon.

As I was writing this, a letter, typical of many, came to hand from Dr. Ling Chün-Yo at Chengtu. It contained the following passage: "I must tell you how happy we were to receive the 2-6 dichloro-indophenol dye, as Miss Yü Hsi-Hsuan who made use of it for surveying the Vitamin-C content of various vegetables and fruits, in my laboratory, had just finished the supply we had and we were worrying how are we going to get some more for the continuation of the work. The next day (Dec. 4) came the messenger with the dye!"

At the same time it is justifiable to give some idea of the difficulties experienced in distributing apparatus once it had arrived in Chungking, for these are not easily imagined by those accustomed to the good communications of Western countries. The British Military Mission and the RAF with their convoys and planes rendered invaluable and essential assistance in getting equipment to Chungking. But thereafter it might mean months of journey by river-junk or truck, or even mule-pack, before the equipment reached its destination. The sorting out of the

material was also most difficult as conditions in Calcutta did not permit a very methodical packing and consignment of it. A refrigerator came without its key and its kerosene lamp; it was two years before it could be put to use. Mistakes were made; when we expected bacteriological filter candles six inches long we received drinking-water filters three feet high. But all this was inevitable, and in China many organisations went out of their way to be helpful. The trucks of the Kansu Petroleum Administration carried our crates to the northwest, and the Friends' Ambulance Unit trucks took them out in other directions. The greatest debt is owing to the British Ministry of Information, which allowed its buying agent in Calcutta to act as our buying agent also. Considering the sum total of wartime conditions the Scientific Supplies Service has functioned remarkably well; the surprising thing is that it was able to function at all.

On occasion also it was surprising to our Chinese friends. In Kunming once, we found that though the laboratory of the 23rd Arsenal was doing excellent work, it had no accurate chemical balance. By a chance we happened to have an Indian-made one available among our stocks in Kunming so we had the pleasure of going out to Magaidze a couple of days later and delivering the instrument to Dr. Ku Ching-Hsing who had not conceived it possible that we should be able to help him so soon.

At the bottom of List V a list of "Special Orders" will be found. This system was instituted for requirements of an urgent nature but of very small weight. A galvanometer suspension wire, an ounce of phosphotungstic acid, or a few iridectomy scissors, could thus take precedence of heavy equipment and come in by air bag. 67 such urgent orders were placed, and though it was not possible to find all the items asked for, many were duly fulfilled.

### (3) Facilitation of the Output of Scientific Literature from China

Exchange and interchange is the lifeblood of international scientific life. From the beginning, therefore, the office undertook to assist in the sending of Chinese scientific and technical publications and manuscripts to the western world.

The dissemination of news about the activities of Chinese scientists in their isolation was the first and most obvious necessity. The Natural Science Society of China prepared a "science newsletter" called *Acta Brevia Sinensia* of which No. 1 appeared in January, 1943, and of which the most recent issue is No. 9. This was despatched to the west in mimeographed form for the most important libraries, and on many occasions items from it have appeared in the columns of *Nature* and *Science*. A parallel activity was the preparation of detailed accounts of the scientific work of the two National Academies (*Academia Sinica* and the Peiping Academy): these were transmitted not only to the UK and the USA for circulation and publication, but also the Academy of Sciences of the USSR, and to the Indian journal *Science &*

*Culture*, in which they appeared in print. Another example was an article prepared by Dr. Tang Pei-Sung on Biology in Wartime China for the *Quarterly Bulletin of Chinese Bibliography* and reprinted in *Nature*.

As the result also of my travels through the ten provinces I thought it advisable to prepare a series of articles for *Nature* giving a detailed account of the achievements of the Chinese scientists and technologists in the various zones.

These appeared as follows:-

- |                                                                              |                                |
|------------------------------------------------------------------------------|--------------------------------|
| (1) Science in Southwest China, I, the Physico-Chemical Sciences             | 1943, 152, 9                   |
| (2) Science in Southwest China, II, the Biological Sciences                  | 1943, 152, 36<br>1943, 152, 64 |
| (3) Science in Chungking                                                     | 1943, 152, 64                  |
| (4) Science in Western Szechuan, I, Physico-Chemical Sciences and Technology | 1943, 152, 343                 |
| (5) Science in Western Szechuan, II, Biological Sciences                     | 1943, 152, 372                 |
| (6) Science and Technology in the Northwest of China                         | 1944, 153, 238                 |
| (7) Science in Kweichow and Kuangsi                                          | 1945, 156, 496                 |
| (8) Science and Technology in China's Far Southeast (in press)               |                                |
| (9) The Chungking Industrial and Mining Exhibition                           | 1944, 153, 672                 |

Besides these, Mr. Huang Hsing-Tsung and I translated an address by Generalissimo Chiang Kai-Shek which appeared in *Nature* (1943, 152, 180) under the title "The Way and Spirit of Science." The nine articles listed above aroused widespread interest both in the west and in China: in 1945 they were translated into Chinese and are appearing in book form published by the Chunghua Book Co., together with other articles and essays written while in China.

Being fortunately furnished with a good camera, I had taken the opportunity of making as many pictures as possible when visiting scientific and technical institutions, always with an eye to the contrast between the new and the old; the patternshop moulds piled up among the disused images of the gods in former temples; the pilot cracking plant steaming away side by side with a Han tomb. Upwards of a hundred of these photographs have now been published, with a running commentary, under the title "Chinese Science", by the Pilot Press in London.

The second most obvious necessity was the transmission of original scientific manuscripts to the West for publication. Not only was it entirely natural and proper that the Chinese scientists should wish to continue their contributions to the famous world journals in the different branches of science, but even if they had wished to publish only in Chinese journals it would have been impossible for them to do so owing to the poor facilities and low printing standards of the western provinces in wartime.

Alphabetical typesetting was almost unobtainable. Moreover, the difficulties of wartime mail correspondence made it extremely difficult, to say the least, for Chinese scientists to communicate their papers to the world journals. Probably few people realise that in such a harmless subject as mathematical logic it has been for the past seven years almost impossible to send a paper on this subject freely through the mails. Censors' offices are ignorant of science and mathematics, and prone to play for safety by suppressing anything they do not understand. It is to be hoped that the unenviable prominence given to science by the invention of means to release intra-atomic energy will not greatly exacerbate this difficulty.

We were therefore very happy to be able to transmit scientific papers safely, with the Science Department of the British Council as a distribution centre, and that this service was appreciated by the Chinese may be seen by the fact that during the first year we transmitted 30 papers, while during the second and third years we transmitted 108, or a little over 50 a year.

Statistics follow:-

|                                                     | No. of papers |
|-----------------------------------------------------|---------------|
| Subjects: Mathematics                               | 14            |
| Physics                                             | 21            |
| Engineering (incl. Chem. Eng.)                      | 11            |
| Meteorol., Geol. and Geography                      | 4             |
| Chemistry                                           | 4             |
| Biochem., Physiol., Pharmacol.<br>and Endocrinology | 17            |
| Experimental Morphology                             | 16            |
| Systematic Zool. and Entomology                     | 6             |
| Systematic Bot. and Mycology                        | 5             |
| Plant Physiol. and Pathology                        | 12            |
| Animal Pathol. and Parasitology                     | 7             |
| Cytology and Genetics                               | 8             |
| Agricultural Science                                | 1             |
| Anthropol., Sociol. & Economics                     | 8             |
| History of Science                                  | 1             |
| Miscellaneous                                       | 3             |
|                                                     | 138           |
| Results: Published                                  | 69            |
| Accepted for publication                            | 4             |
| Under consideration                                 | 39            |
| Returned to author for revision                     | 12            |
| Decision unknown                                    | 11            |
| Not intended for immediate pub.                     | 3             |
|                                                     | 138           |
| By Countries: Sent to British journals              | 124           |
| Sent to American journals                           | 11            |
| Sent to Indian journals                             | 3             |
|                                                     | 138           |

It will thus be seen that a very high proportion of the papers submitted have been in fact published. Apart from those pending, we have 73 accepted, and 12 returned to the authors for revision, i.e. 86% acceptance. In view of the extraordinary difficulties of scientific work under the severest conditions of war in an almost wholly non-industrialised country, these figures must be considered remarkable testimony to the high level of Chinese science. The range and variety of the papers transmitted may be seen from List VI in which they are shown in detail.

As the letters from the editors began to come in, we were deeply gratified to notice expressions such as these:—

"an excellent piece of work"

"a remarkable piece of work for one working in isolation"  
(Lord Keynes)

"a considerable advance over previously published investigations"

"I am very glad we are able to publish this good piece of work"

"I am indeed glad to know that it is possible in China at the present time to carry on research of such a nature"

"An exceedingly good paper"

"A very remarkable effort"

"A most painstaking and careful piece of work."

And so on and so on. We duly reported to our Chinese colleagues the congratulations of the editors in the west.

With the conclusion of the war, and a much to be hoped-for relaxation of censorship restrictions, it should be possible for Chinese scientists and western editors to place themselves in direct contact through the ordinary channels, but though we expect that this kind of work will diminish, the Council will continue to offer help with regard to the placing of papers, and to act as a forwarding agency, if desired.

In spite of what has been said above as to the difficulties of publication in wartime China, quite a number of Chinese scientific periodicals stubbornly persisted, and as time went on we organised in a more and more thorough manner the regular transmission of from 1 to about 40 copies of each to the principal libraries, or such libraries as might be designated, in the British Commonwealth. A list of these periodicals, 104 in number, is given in List VII. Very often they are printed entirely in English or some other alphabetical language, but where this is not the case we are careful to give a translation of the title, and sometimes of the table of contents, on each copy, in order that any articles of special interest to a given research worker in the west could be translated by Chinese friends temporarily resident there.

Some of these journals, among which may be mentioned the *Journal of Scientific Agriculture*, the *Meteorological Magazine*, and the *Proceedings of the Chinese Physiological Society*, have maintained an extraordinarily high standard of printing and production in spite of all difficulties. With the resumption of

... will probably be relieved of some of this work, but will always be open to transmit Chinese publications when desired.

Attempts have been made during the past three years to organise the preparation of English-language abstracts of valuable papers appearing only in Chinese, but this is a very large and difficult field and complete success has not attended our efforts. A certain number of such abstracts have however been sent to journals such as *Chemical Abstracts* and have duly appeared.

Lastly, considerable efforts have been made to fill the needs of British libraries needing Chinese books. It has been possible to find a number of the great collections of "tsung-shu" and to transmit them to England, and recently this work was greatly enhanced by a splendid gift of more than 2000 volumes from the Chinese Ministry of Education.

A number of books, pieces of Chinese-made scientific equipment, specimens, and other objects, were sent to London for the 10th. Anniversary Exhibition of the British Council.

(4) Provision of Advice to Chinese Scientific and Technical Organisations

Although whatever would come under this heading would be rather intangible and nominal, it has nevertheless been useful in many ways to have a mixed group of British and Chinese scientists in close association with diplomatic circles. At my first coming to China I was deeply honoured by election as Corresponding Member of both the National Academies, the *Academia Sinica* and the *Peiping Academy*; and the closest connections with them have since been maintained. This honour was also conferred on Professor E. R. Dodds of the chair of Greek in the University of Oxford whose colleague I was in bringing to China at the end of 1942 the official greetings of the Royal Society, the *British Academy* and the principal British Universities. At a later date I was appointed Adviser ("Ku wen") to the Ministry of Education, and to the National Resources Commission of the Ministry of Economic Affairs; Consulting Member ("Wei-to yendjiu yuen") of the Chinese Air Force Research Bureau, and Special Counsellor ("Tzu-hsün Chuan-yuen") of the Chinese Army Medical Administration. Early 1945 I became Counsellor, H.B.M. Embassy, Chungking.

Dr. Sanders was appointed Visiting Professor at National Central University, and, with Dr. Picken, at the Army Medical College in Kweichow. Dr. Sanders was also made Adviser to the National Health Administration.

One feels that the amount of advice tendered to Chinese by Westerners is sometimes rather excessive. We have simply held ourselves in readiness to help in any way possible when called upon.

... lectures given by members of the staff at the request of the Chinese should come under this heading. During the Tours 123 scientific lectures were given by Drs. J. & D. Needham and by Drs. Picken and Sanders; as well as at least another 100 during the Visits and while in Chungking. In the later phases Mr. Tsao and Miss Chiu did a good deal of extempore interpreting extremely well, but more often this was done by members of the staff of the institution in which the lecture was given.

(5) Assistance with the Exchange of Scientific Personnel

For the past three years the British Council has offered a varying number of travelling professorships and fellowships to enable Chinese scholars and research workers to spend periods of time in Great Britain. This scheme, which it is hoped will continue for some time to come, has wider scope than the field of the natural sciences. A summary of the number of scientific men and women involved, however, is given below.

|                                                    | Years  |        |        |
|----------------------------------------------------|--------|--------|--------|
|                                                    | 1944-5 | 1945-6 | 1946-7 |
| British Council                                    |        |        |        |
| Visiting Professorships                            | 2      | 3      | 3      |
| Visiting Fellowships                               | 3      | -      | 13     |
| Studentships (chosen by the Ministry of Education) | 10     | 57     | -      |

The names of those invited to work in England will be found in List VIII.

Besides these, assistance has been given in various ways to an additional 12 professors, proceeding to England either as guests of the British Council or under other auspices, (see List VII).

This completes the logical account of the activities of the Office during the past two or three years. We may now fill in some of the details which were unnecessary to the foregoing argument.

First, with respect to the tours and visits made. It is convenient to classify them as follows:—

- (1) Visit to the Southwest. The neighbourhood of Kunming, Dr. J. Needham.
- (2) Western Tour. To Chengtu, Chiating, Wutongchiao, Lichuang, Luhsien. Dr. J. Needham and Mr. Huang Hsing-Tsung.
- (3) Northwestern Tour. To Lanchow, Laochunmiao and Tunhuang. Dr. J. Needham and Mr. Huang Hsing-Tsung.

- (4) Southeastern Tour. To Kweiyang, Liuchow, Kweilin, Hengyang, Kukong, Ganhsien, Changting, Nanping, Fuchow, Shaowu and Bapu. Dr. J. Needham and Mr. Huang Hsing-Tsung.
- (5) Southwestern Tour. To Kweiyang, Anshun, Kunming, Tali, Baoshan and Fengmingsun. Dr. J. Needham, Dr. D. M. Needham and Mr. Tsao Tien-Chin.
- (6) Visit to Kunming. Dr. Sanders.
- (7) Visits to Chengtu. Dr. D.M. Needham, Dr. Sanders and Miss Chiu Chiung-Yun; Dr. Picken and Mr. Tsao Tien-Chin.
- (8) Visit to Lanchow. Dr. Sanders.
- (9) Second Southwestern Tour. To Kweiyang, Anshun, Kunming and Tali. Dr. Picken, Dr. Sanders and Mr. Hou Tsu-Tsun.
- (10) Northern Tour. To Santai, Kuangyuen, Hanchung, Chengku, Kuluba, Baochi, Wukung, Sian and Tienshui. Dr. J. Needham, Dr. D. M. Needham, Mr. Tsao Tien-Chin and Miss Chiu Chiung-Yun.

The above scheme includes the names of many of the staff members. But some whose work was very valuable do not appear as they never participated in any journeys.

Most prominent among these colleagues who stayed at home and kept things going may be named Prof. William Band and Prof. Hu Chien-Shan. The former occupied the chair of physics at Yenching University for some years before the war, and escaping with his wife from Peiping in the nick of time before the Japanese could intern them, spent some years with the Chinese guerillas. The latter, a research collaborator of Prof. P. M. S. Blackett, FRS, and an authority on cosmic rays, joined our group from Wuhan University, and now occupies a chair of mechanical engineering at National Central University.

Dr. Dorothy Needham, for many years past a leader of research in the Cambridge University Biochemical Institute, who reached Chungking in February 1944, played a vital part in organising the work of the office. Among many other duties, she took charge of the transmission of MSS for publication and the exchange of reprints. Her presence in China was a great encouragement to the participation of Chinese women in scientific work.

Our two other colleagues from England were Dr. Laurence Picken and Dr. Gordon Sanders. The former came from the Cambridge Zoological Laboratory, where he had made a name for himself in biophysics; the latter from the Oxford Pathological Laboratory, where he had been a collaborator in Sir Howard Florey's team of workers on penicillin. Dr. Picken was able to use to the full his wide knowledge of agriculture and applied biology in general; Dr. Sanders was able to give great assistance

not only in the field of antibiotics, but also in that of blood banks and transfusion in which service he had been during the war in England.

These colleagues, by the force of circumstances, were necessitated to do a good deal of office work which ideally should have been done by colleagues of less high technical qualifications. When in 1942 I visited the British Central Scientific Office in Washington and asked what their principal problem had been, I was told that the greatest difficulty was to master the masses of documents which accumulate in a scientific liaison office. I know now from personal experience how true this is. Dr. Picken therefore did a useful job in reorganising our filing system; while it was Dr. Sanders who organised the method of distribution of periodicals and Miss Chiu who presided over the distribution of books.

General secretarial duties were carried out by Miss Liao Hung-Ying (a well-known Oxford agricultural chemist), and Mr. Hou Tsu-Tsun, while Mr. Tsao Tien-Chin took over the more than full-time job of controlling the incoming material of the Scientific Supplies Service. In the latest phases Dr. Chou Chia-Chih acted as representative for this purpose in Kunming, while Dr. Gautom G. Banerji (a Cambridge biochemist), resident in Calcutta, had throughout been Adviser to the buying agents in India. At the end of 1945, after the departure of Dr. Sanders, Dr. Lu Gwei-Djen arrived from New York to join the group, and as a nutritional biochemist whose main work has lain in clinical fields, she will look after medical matters in general. She has had long experience with deficiency diseases in Shanghai, Cambridge (where she took her doctorate) California, Alabama, and New York. We are now expecting Dr. C.M.G. Bolton from England as geological adviser. Dr. Hu Chien-Shan will remain as part-time technical adviser in physics and the mechanical sciences.

Among the secretarial staff, the office has been honoured by the presence of two representatives of distinguished Chinese families—Miss Tao Wei-Cheng, the daughter of the well-known sociologist Tao Meng-Ho; and Miss Mai Chia-Tseng, granddaughter of the famous Ching Dynasty scholar and reformer, Kang Yu-Wei.

Since henceforward this office will be, to some extent, losing its identity in the general British Council Office directed by Prof. P. M. Roxby, it is desirable to place on record here the group which worked, often (before the House was built) under very difficult and uncomfortable conditions, during the three war years. It is hard for those who have worked only under modern conditions to understand what life is like in a city with non-functional telephones and unreliable electric light, no taxis, and living conditions which would be considered as intolerable elsewhere. Members of the staff are named in the order of their joining the office. All were not, of course, present at one time.

SCIENTIFIC STAFF

|                                |                                                               |
|--------------------------------|---------------------------------------------------------------|
| Dr. Joseph Needham, F.R.S. 李約瑟 | (Biochemistry), Director                                      |
| Mr. Huang Hsing-Tsung 黃興宗      | (Organic Chemistry)                                           |
| Miss Liao Hung-Ying 廖鴻英        | (Agricultural Chemistry)                                      |
| Dr. Dorothy M. Needham 李大斐     | (Biochemistry), Chemical Adviser                              |
| Prof. William Band 班威廉         | (Physics), Physics Adviser                                    |
| Dr. Gautom G. Banerji          | (Biochemistry), Supplies Service Representative in India      |
| Miss Chiu Chiung-Yun 邱瓊雲       | (Pharmacology), Books Officer                                 |
| Mr. Tsao Tien-Chin 曹天欽         | (Organic Chemistry), Supplies Service Officer                 |
| Dr. Laurence Picken 畢鏗         | (Biophysics), Biological and Agricultural Adviser             |
| Dr. Gordon Sanders 薩恩德         | (Pathology), Medical Adviser                                  |
| Prof. Hu Chien-Shan 胡乾善        | (Physics), Physical, Mathematical, and Engineering Adviser    |
| Prof. Chien Chia-Chi 錢家祺       | (Physics)                                                     |
| Mr. Hou Tsu-Tsun 侯助存           | (Chemistry)                                                   |
| Prof. Chou Chia-Chih 周家熾       | (Plant Pathology), Supplies Service Representative in Kunming |
| Dr. Lu Gwei-Djen 魯桂珍           | (Biochemistry), Nutritional Science Adviser                   |
| Mr. Long Huai-Min 龍懷民          | (Radio Physics) Technical Translator                          |
| Dr. C.M.G. Bolton              | (Geology), Geological Adviser                                 |

ADMINISTRATIVE STAFF

|                         |                               |
|-------------------------|-------------------------------|
| Mr. Liang Tze-Hua 梁子華   | Accounts Officer              |
| Mr. Peng Chen-Hua 彭振華   | Chinese Secretary             |
| Mrs. Cheng I-Yun 鄭逸雲    | Periodicals Officer           |
| Miss Mai Chia-Tseng 麥佳曾 | Assistant Books Officer       |
| Miss Tao Wei-Cheng 陶維正  | Secretary                     |
| Miss Liu Bi-Hsia 劉碧霞    | Secretary                     |
| Miss Wu Pei-Dju 吳佩珠     | Secretary                     |
| Miss Hsieh Yu-Wen 謝幼文   | Secretary                     |
| Mr. Yang Pei-Sung 楊佩松   | Secretary                     |
| Miss Chen Rjui-Tang 陳瑞棠 | Secretary                     |
| Mr. Chen Bo-Tao 陳伯韜     | Periodicals Clerk             |
| Miss Sun Mei-Lien 孫美蓮   | Periodicals Clerk             |
| Mr. Hou Kuei-Ming 侯貴銘   | Periodicals Clerk             |
| Mr. A. S. Doshi         | Supplies Service Clerk, India |

I take pleasure in recording the gratitude due to our chief driver, Kuang Wei, and mechanic Ling Mei-Hsing, for extremely reliable and willing service under difficult, and on occasion dangerous, conditions. We have used a 2½ ton truck obtained from the RAF, two 1½ ton vans allocated by the British Military Mission, and latterly two jeeps.

Without going into wearisome detail, we may conclude with the recital of some further facts which may be of interest.

The Natural Science Society of China, during the period under review, had two representatives in England Dr. Chu Shu-Ping the algologist and Dr. Chang Min-Chueh the physiologist. They exerted themselves very much to send aid to their colleagues in China, and we were glad that the British Council was able to help with transportation facilities.

In Chungking the Office maintained excellent relations with representatives of other nationalities. The Soviet Embassy's Cultural Counsellor, Mr. V. Skvortzov, was ever ready to be of assistance, and close contact was kept with Mr. J. H. Paxton and Mrs. Wilma Fairbank, Cultural Relations Officers at the United States Embassy, and Mr. John Fairbank at the Office of War Information. Sir Frederick Eggleston at the Australian Legation was a firm friend to our work so long as he remained in Chungking, and this tradition was kept up by his successors. So also General Odlum at the Canadian Embassy. My visits to Canada and Australia in the early part of 1945 strengthened these relations. We took some part in the Australian-Chinese negotiations for the establishment of an ionosphere observation station, and were able to provide the Australian workers on alunite utilisation with long needed but unobtainable details of the Chinese work on the same subject. The French, Swedish and Norwegian diplomatic representatives also took a great interest in our work.

The example of the work on alunite, just mentioned, indicates how great a mistake it would be to imagine that the help all passed in an eastbound direction. It is now possible to state that the Chinese Air Force Research Bureau placed their unrivalled knowledge of the use of ply-bamboo in airplane construction and repair at the service of the other United Nations. Quartz crystals for radio frequency control, prepared by the Peiping Academy, and whole radio beacon sets made by the National Resources Commission, were used by forces of the other Allies. Indeed, the vaccines prepared by the National Epidemics Prevention Bureau were used in preference to western-made sera since there are local differences in strains of pathogenic bacteria, and the local vaccine confers more protection. Another example, drawn from the field of agriculture, might be the efforts on the part of the Chinese to supply other countries through us with seeds of the famous Kudze grass ("Ge-Tun") which has exceptional binding and anti-erosion properties.

Among activities of the Office not so far mentioned was the distribution of considerable numbers of **Monthly Science News**, **British Medical Bulletin**, **British Engineering Abstracts**, and other Council publications. These were very greatly appreciated. Some issues were reprinted in China from matts. **British Standard Specifications** and **H.M. Stationery Office** publications were also made available. The **British Overseas Press Service** in **New York** supplied us throughout the war years with scientific and technological press clippings, a very useful service.

We were also occupied with questions of translations, mostly into Chinese. At one time we were able to do something towards breaking a bottleneck in Washington and London by organising a panel of translators of papers published in Japanese scientific journals.

Successful showings of British scientific films were given, and particular interest was shown in those on penicillin, and anaesthesia. Arrangements were fixed with the Chinese Broadcasting Corporation for the rebroadcasting of some of the scientific talks in the B.B.C.'s "kuo yu" program. Besides this Dr. D. Needham, Dr. Picken and Dr. Sanders broadcast from Chungking and Dr. J. Needham from Chengtu.

One of the directions in which we felt the greatest lack was the absence of equipment in our office for making microfilm copies of documents. The Department of Scientific and Industrial Research in London, for example, would send out a valuable dossier of reprints or photostats concerning the technique of low temperature carbonisation. Our dilemma was that there were half a dozen plants in Free China which urgently needed this information, yet owing to difficulties of communication it would be many months before it could be digested in one factory and passed on to the next. The proper solution would have been to have micro-filmed the dossier on the spot and circulated it in several copies.

Lastly, I wish to pay a special tribute to the cooperation of the staff of the British Embassy in our work. Such understanding was not unremarkable, for it is a comparatively new thing in international relations that science and technology should take a prominent place. But from the first we had unlimited support from Sir Horace and Lady Seymour, to whom a large share in the success of the work must undoubtedly be attributed. More than this, I found in Sir Eric Teichman (whose death after his return to England was so tragic) a charming mentor, through whom one felt linked to the old days in Peking. At my first coming to Kunming, Mr. A. G. Ogden, then Consul-General there, was unsparing of his time in discussing with me how my mission could best be achieved. And later on, when the office was in process of organisation, two figures were especially important, namely Mr. Enoch Williams and Mr. Alan Veitch, successively Accounts Officers at the Embassy. Had they possessed less imagination and sympathy than they did they would have nipped the growth

of scientific cooperation in the bud. I should like also to refer to the friendship of Mr. J. C. Hutchinson, Commercial Counsellor, Mr. J. T. Asquith, Industrial Counsellor, and Mr. W. V. Blewett, representative of the Ministry of Supply at an earlier stage, all of which eased our difficulties and encouraged us day by day.

I concluded the first year's report with a few words on the inevitable growth of organisations for international scientific and technical cooperation. The germ of the ideal of an International Science Cooperation Service originated partly from the practice of this Sino-British Office, as well as from the theory, universally subscribed to in the scientific world, of the worldwide commonwealth of science. Now, at the conclusion of the three years, a United Nations Educational, Scientific and Cultural Organisation has in fact been set up. Mistakes that we have made may serve to help wider and larger organisations to do better. Paraphrasing a famous passage of Sir Francis Bacon (which I used once before in a different connection), it is not perhaps too much for us to say that our work has been like "that noise made by the musicians when they are tuning their instruments, which is nothing sweet or pleasant to hear, but is a cause why the music is sweeter afterwards. So have we been content to tune the instruments of the muses, that they may play that have better hands."

# LIST I

## Chinese Scientific and Technical Institutions visited by the British Scientific Representatives (See List V of first Report)

|         |                                                                               |               |
|---------|-------------------------------------------------------------------------------|---------------|
| No. 100 | Agricultural Association of China                                             | Chungking     |
| 101     | New Life Movement Womens' Advisory Committee Industrial and Rural Enterprises | Chungking     |
| 102a    | Ministry of Agriculture Headquarters                                          | Hsiangdiendze |
| 102b    | Chungking Dairy Farm                                                          | Litzeba       |
| 104     | Ministry of Communications, 4th Oil Refinery Cracking Plant                   | Chungking     |
| 110     | Chekiang University, College of Engineering                                   | Tsunyi        |
| 111     | Lingnan University                                                            | Kukong        |
| 112     | Lingnan Medical College                                                       | Kukong        |
| 113     | Lingnan Agricultural College                                                  | Pingshek      |
| 114     | Chungshan University                                                          | Pingshek      |
| 115     | Chungshan College of Agriculture                                              | Liyuanbao     |
| 116     | Chungshan Medical College                                                     | Lochang       |
| 117     | Amoy University                                                               | Changting     |
| 118     | Fukien Provincial Meteorological Service                                      | Yungan        |
| 119     | Fukien Provincial Geological Survey                                           | Yungan        |
| 120     | Fukien Provincial Agricultural Experiment Station                             | Yungan        |
| 121     | Fukien Provincial Hydroelectric Power Plant                                   | Yungan        |
| 122     | Fukien Provincial Agricultural College                                        | Yungan        |
| 123     | Fukien Provincial Academy of Science                                          | Yungan        |
| 125     | Fuchow Municipal Power Plant                                                  | Fuchow        |
| 126     | Minchiang Steam Navigation Co. Shipbuilding Yard                              | Fuchow        |
| 126a    | Fuchow Lacquer Industry                                                       | Fuchow        |
| 127     | Huanan (Womens') College                                                      | Nanping       |
| 128     | Fukien Provincial Pinewood Root Oil Cracking Plant                            | Chienow       |
| 129     | NHA Plague Prevention Units Headquarters                                      | Chienyang     |
| 130     | Chinan University                                                             | Chienyang     |
| 131     | Fukien United University                                                      | Shaowu        |
| 132     | Fukien Provincial Entomological Survey                                        | Shaowu        |
| 133     | Hangchow (Chihchiang) University                                              | Shaowu        |
| 134     | CIC, Southeast Federation Headquarters                                        | Ganhsien      |
| 135     | NRC Wolframite Mines                                                          | Tayu          |
| 136     | Suchow (Tungwu) University                                                    | Hsienjengmiao |
| 137     | NRC Electrical Factory No. 2 (lamps, tubes, and valves)                       | Kweilin       |
| 138     | NRC Electrical Factory No. 4a (dynamos, cells and batteries)                  | Kweilin       |
| 139     | NRC Central Radio Works (assembled sets)                                      | Kweilin       |
| 140     | Academia Sinica, Institute of Geology                                         | Liangfeng     |
| 141     | Academia Sinica, Institute of Experimental Psychology                         | Liangfeng     |
| 142     | Academia Sinica, Institute of Physics                                         | Liangfeng     |
| 143     | Kuangsi Science Institute                                                     | Liangfeng     |
| 144     | Kuangsi University                                                            | Liangfeng     |
| 145     | NRC Pingkuei Mining Administration                                            | Bapu          |
| 146     | NLP Agricultural Vocational Middle School                                     | Shatang       |
| 147     | NLP Agricultural Experiment Station                                           | Shatang       |
| 148     | Kuangsi University, College of Agriculture                                    | Shatang       |
| 149     | CIC Rural Economics Research Institute                                        | Kweilin       |
| 150     | Kuangsi Provincial Bureau of Reconstruction                                   | Kewilin       |

|     |                                                                 |              |
|-----|-----------------------------------------------------------------|--------------|
| 151 | Kuangsi Provincial Arts Institute                               | Kweilin      |
| 152 | Ministry of War, Oil Cracking Plant                             | Bachi        |
| 153 | Emergency Medical Service Training School                       | Tuyunkuan    |
| 154 | Hsiangya Medical College                                        | Kweiyang     |
| 155 | Kweiyang Medical College                                        | Kweiyang     |
| 156 | Kweichow Science Institute                                      | Kweiyang     |
| 157 | Kweichow Provincial Industrial Museum                           | Kweiyang     |
| 158 | Sanyi Low Temperature Coal Carbonisation Plant                  | Kweiyang     |
| 159 | Kweichow Coalmining Administration                              | Kweiyang     |
| 160 | Kweiyang Municipal Power Plant                                  | Kweiyang     |
| 161 | China Matches Raw Material Chemical Works                       | Kweiyang     |
| 162 | China Agricultural Machinery Mfg. Works                         | Kweiyang     |
| 163 | Kweichow Provincial Agricultural Experiment Station             | Kweiyang     |
| 164 | Kweiyang Provincial Glass Factory                               | Kweiyang     |
| 165 | Kweiyang Provincial Oil, Resin and Paint Factory                | Kweiyang     |
| 166 | Tahsia University                                               | Kweiyang     |
| 167 | NHA National Epidemics Prevention Bureau branch                 | Kweiyang     |
| 168 | Kweichow Provincial Library                                     | Kweiyang     |
| 169 | Chinese Army Medical College                                    | Anshun       |
| 170 | Chinese Army Veterinary College                                 | Anshun       |
| 171 | February the Fourth Textile Factory                             | Kweiyang     |
| 172 | Academia Sinica, Institute of Engineering                       | Kunming      |
| 173 | Academia Sinica, Institute of Chemistry                         | Kunming      |
| 174 | AOA, 53rd. (Optical) Arsenal                                    | Kunming      |
| 175 | China Electric Steel Works (Academia Sinica)                    | Haikou       |
| 176 | NRC Yunnan Iron and Steel Works                                 | Anning       |
| 177 | Chinghua University General Physiology Research Institute       | Anning       |
| 178 | National Academy of Peiping Research Institutes                 | Tapuchi      |
| 179 | Yunnan Botanical Institute                                      | Heilongtang  |
| 180 | NRC Central Radio Works, Kunming branch                         | Heilongtang  |
| 181 | Chinghua University Aeronautics Research Institute              | Bailongtang  |
| 182 | Academia Sinica, Astronomical Observatory                       | Bailongtang  |
| 183 | NRC Power Alcohol Plant                                         | Yangfangwa   |
| 184 | Chinghua University Census and Statistical Research Institute   | Tapanchiao   |
| 185 | Lidien Low Temperature Lignite Carbonisation Plant              | Chienkung    |
| 186 | AOA, 52nd. Arsenal                                              | Fengmingsun  |
| 187 | NRC Central Electrical Mfg. Works (transformers, dynamos, wire) | Fengmingsun  |
| 188 | AOA, 23rd. Arsenal, Phosphorus Branch                           | Magaidze     |
| 189 | NRC Copper Refinery and Aluminium Works                         | Magaidze     |
| 190 | NRC Chemical Works                                              | Magaidze     |
| 191 | NRC Power Plant                                                 | Magaidze     |
| 192 | AOA, 21st. Arsenal                                              | Anning       |
| 193 | Nanching and Lienta Middle Schools                              | Kunming      |
| 194 | Southwestern Associated University Library                      | Kunming      |
| 195 | Yunnan Provincial Tanning Works                                 | Kunming      |
| 196 | Huachung University                                             | Hsichow      |
| 197 | BRCS/FAU 37th. Field Hospital                                   | Baoshan      |
| 198 | AOA, 53rd. Arsenal Field Repair Shops                           | Baoshan      |
| 200 | Chinese Army, 37th. Stationary Hospital                         | Baoshan      |
| 201 | Chinese Army, 19th. Field Hospital                              | Baoshan      |
| 202 | Chinese Army, 21st. Field Hospital                              | Baoshan      |
| 203 | Chinese Army, 99th. Army Base Hospital                          | Baoshan      |
| 204 | Kuanghua Medium Temperature Coal Carbonisation Plant            | Tsuchiung    |
| 205 | Kweichow University                                             | Pingyi       |
| 206 | Chinese Air Force Anti-Aircraft Gun Repair Shops                | Huachi       |
| 207 | AOA, 44th. Arsenal                                              | Huachi       |
| 208 | AOA, 53rd. Arsenal, Kweiyang branch                             | Chungtsaosse |
|     |                                                                 | Kweiyang     |

|     |                                                        |                 |
|-----|--------------------------------------------------------|-----------------|
| 209 | All-China Institute of Sericulture                     | Tsunyi          |
| 210 | Chekiang University                                    | Tsunyi & Meitan |
| 211 | Chinese Army Officers' Language College                | Tsunyi          |
| 212 | Chekiang University, History Research Institute        | Tsunyi          |
| 213 | AOA, 41st. Arsenal                                     | Tungtze         |
| 214 | Southwest Associated University, Physics Laboratory    | Kunming         |
| 215 | NHA, National Epidemic Prevention Bureau               | Hsishan         |
| 216 | Academia Sinica, Institute of Mathematics              | Kunming         |
| 217 | Chungsheng Electro-metallurgical Works                 | Chungking       |
| 218 | War Service Vitamin Production Laboratories            | Chungking       |
| 220 | Tienyuen Electrochemical Works                         | Chungking       |
| 221 | West China Museum of Science                           | Beipei          |
| 222 | Kansu Provincial Health Administration                 | Lanchow         |
| 223 | Lanchow Municipal Public Health Station                | Lanchow         |
| 224 | Borden Memorial Hospital and Other Hospitals           | Lanchow         |
| 225 | NHA, Northwest Epidemics Prevention Bureau             | Lanchow         |
| 226 | NHA, Northwest Hospital                                | Lanchow         |
| 227 | Northwest Medical Training School                      | Lanchow         |
| 228 | NIRB, Northwestern Branch                              | Lanchow         |
| 229 | NLP, Northwest Epizootic Prevention Bureau             | Lanchow         |
| 230 | NHA, Public Health Experimental Area                   | Bishan          |
| 231 | Chiangsu Medical College                               | Beipei          |
| 232 | Hsiangya Medical College (evacuated)                   | Chungking       |
| 233 | Southwestern Associated University, Biological Labs.   | Kunming         |
| 234 | Yunnan University, Biological and Medical Labs.        | Kunming         |
| 235 | Army Medical College, branch                           | Kunming         |
| 236 | Kunhua Hospital and AMA Blood Bank                     | Kunming         |
| 237 | Huidien Hospital                                       | Kunming         |
| 238 | NHA, National Epidemic Prevention Bureau               | Hsishan         |
| 239 | Academia Sinica, Institute of Chemistry                | Kunming         |
| 240 | Peiping Academy                                        | Heilongtang     |
| 241 | Institute of Hospital Technology                       | Chungking       |
| 242 | Yutsai School                                          | Beiwenchuan     |
| 243 | Shanghai Medical College                               | Koloshan        |
| 244 | NHA, National Institute of Health (Medical Research)   | Koloshan        |
| 245 | NHA, National Central Hospital                         | Koloshan        |
| 246 | Szechuan Provincial Public Health Administration       | Chengtu         |
| 247 | National Central University Medical School             | Chengtu         |
| 248 | National Central University Dental School              | Chengtu         |
| 249 | Huahsi and Chilun Universities, Medical School         | Chengtu         |
| 250 | United Hospitals of the Associated Universities        | Chengtu         |
| 251 | Huahsi University Dental School                        | Chengtu         |
| 252 | Peiping Union Medical College Nursing School           | Chengtu         |
| 253 | Huahsi University School of Pharmacy                   | Chengtu         |
| 254 | Nanking University, Biological Laboratories            | Chengtu         |
| 255 | Huahsi University School of Animal Husbandry           | Chengtu         |
| 256 | Ginling College Department of Music                    | Chengtu         |
| 257 | National College of Social Education                   | Bishan          |
| 258 | Fine Arts College and Associated Institutions          | Bishan          |
| 259 | Tangshan Engineering College                           | Dingchia-an     |
| 260 | Northeastern University                                | Santai          |
| 262 | Tahua Cotton Mills                                     | Kuangyuen       |
| 263 | 2nd. War Area Arsenal                                  | Kuangyuen       |
| 264 | Yungshing Power Alcohol Plant                          | Kuangyuen       |
| 265 | Lunghai Railway Repair Shops                           | Kuangyuen       |
| 266 | Northwest Medical College                              | Hanchung        |
| 267 | Northwest University                                   | Chengku         |
| 268 | Northwest Engineering College                          | Kuluba          |
| 269 | Army Medical College, branch                           | Sian            |
| 270 | Shensi Provincial Medical College and Hospitals        | Sian            |
| 271 | Shensi Provincial Hygiene Laboratory and Vaccine Plant | Sian            |

|      |                                                        |                     |
|------|--------------------------------------------------------|---------------------|
| 272  | Shensi Provincial Medical Supplies Factory             | Sian                |
| 273  | Shensi Provincial Industrial Research Bureau Labs.     | Sian                |
| 274  | Lunghai Railway Headquarters and Locomotive Department | Sian                |
| 275  | Beiyang Engineering College                            | Sian                |
| 276  | Chinling Mountains Forest Conservation Service         | Chouchih            |
| 277  | Honan University                                       | Baochi              |
| 278  | Shenhsin Cotton Mills and Paper Factory                | Shihlipu            |
| 279  | Chinese Association of Labour Welfare Work             | Shihlipu            |
| 280  | Yungshing Industrial Corporation Factories             | Baochi & Tsaichiapo |
| 281  | Baotien Railway Construction Works                     | Baochi              |
| 282  | CIC Machine Cooperative                                | Shuangshihpu        |
| 283  | Soil Conservation Service Experiment Station           | Tienshui            |
| 284  | Lunghai Railway Locomotive Repair Shop                 | Baochi              |
| 285  | CIC Northwestern Federation Headquarters               | Baochi              |
| 286  | Huangho River Basin Hydraulic Engineering College      | Baochi              |
| 287  | Northwest Agricultural College and Farms               | Wukung              |
| 287a | Peiping Academy (Northwestern Botanical Survey)        | Wukung              |
| 288  | NLP Northwest Agricultural Experiment Station          | Wukung              |
| 289  | National Hydraulic Engineering Research Institute      | Wukung              |
| 290  | Tsuntch Middle School                                  | Sian                |
| 291  | CMS Middle School                                      | Mienyang            |
| 292  | CIC Men and Machines Office                            | Chengtu             |
| 293  | China Sugar Factory                                    | Neichiang           |
| 294  | National Central University, College of Agriculture    | Shapingba           |
| 295  | National Central University, Department of Forestry    | Shapingba           |
| 296  | Women's Agricultural Vocational School                 | Koloshan            |

## LIST II

Scientific and Technical Books transmitted to Chinese Institutions  
(position at the end of December, 1945)  
(See List IV of First Report)

|                                                       | Already<br>transmitted | Now en<br>route |
|-------------------------------------------------------|------------------------|-----------------|
| Academia Sinica, Headquarters                         |                        |                 |
| Academia Sinica, Institute of Astronomy               | 26                     |                 |
| Academia Sinica, Institute of Botany                  | 4                      |                 |
| Academia Sinica, Institute of Chemistry               | 44                     |                 |
| Academia Sinica, Institute of Engineering             | 14                     |                 |
| Academia Sinica, Institute of Experimental Medicine   | 15                     |                 |
| Academia Sinica, Institute of Experimental Psychology | 17                     |                 |
| Academia Sinica, Institute of Geology                 | 13                     |                 |
| Academia Sinica, Institute of History and Archaeology | 2                      |                 |
| Academia Sinica, Institute of Mathematics             | 25                     |                 |
| Academia Sinica, Institute of Meteorology             | 24                     |                 |
| Academia Sinica, Institute of Physics                 | 16                     | 10              |
| Academia Sinica, Institute of Physical Anthropology   | 4                      |                 |
| Academia Sinica, Institute of Zoology                 | 2                      | 12              |
| Academia Sinica, Institute of Zoology                 | 20                     |                 |
| Academia Sinica, total                                | 63                     |                 |
| Academy of Peiping, Headquarters                      | 289                    |                 |
| Academy of Peiping, Institute of Physics              | 1                      |                 |
| Academy of Peiping, Institute of Zoology              | 7                      |                 |
| Agricultural Association of China                     | 5                      |                 |
| Agricultural Experiment Station, Liuchow (SW)         | 11                     |                 |
| Agricultural Experiment Station, Wukung (NW)          | 1                      |                 |
| Agricultural Extension Commission                     | 1                      |                 |
| All-China Institute of Geography                      | 1                      | 12              |
| All-China Institute of Sericulture                    | 29                     |                 |
| Amoy University                                       | 15                     | 23              |
| Animal Industry Research Station                      | 102                    |                 |
| Bank of Communications Research Department            | 5                      |                 |
| Biological Specimens Manufacturing Institute          | 14                     |                 |
| Borden Memorial Hospital, Lanchow                     | 1                      |                 |
| Canton Union Theological College                      | 1                      |                 |
| Central Automotive Parts Manufacturing Works          | 20                     |                 |
| Central Broadcasting Station                          | 13                     |                 |
| Central Forestry Research Bureau                      | 1                      | 65              |
| Central Hospital, Chungking                           | 10                     |                 |
| Central Land Survey School                            | 6                      |                 |
| Central Meteorological Bureau                         | 5                      |                 |
| Central Planning Board                                | 12                     |                 |
| Central Political Training Institute                  | 6                      | 34              |
| Chekiang University                                   | 1                      |                 |
| Chiangu Province Medical College                      | 285                    | 159             |
| Child Welfare Committee, Chengtu                      | 5                      | 16              |
| Chilu University                                      | —                      | 2               |
| China Agricultural Machinery Mfg. Co.                 | 8                      |                 |
| Chinese Air Force, First Hospital                     | 1                      |                 |
| Chinese Air Force, Headquarters                       | 6                      |                 |
| Chinese Air Force, Research Bureau Exp. Station       | 25                     |                 |
| Chinese Air Force Signal School                       | 38                     |                 |
| Chinese Army Geodetic Survey                          | —                      | 44              |
|                                                       | 1                      |                 |

|                                                                                 | Already<br>transmitted | Now en<br>route |
|---------------------------------------------------------------------------------|------------------------|-----------------|
| Chinese Army Medical Administration, Blood Bank                                 |                        |                 |
| Chinese Army Medical Administration, First Base Hospital                        | 1                      |                 |
| Chinese Army Medical Administration, Headquarters                               | 6                      |                 |
| Chinese Army Medical College, Anshun                                            | 35                     |                 |
| Chinese Army Medical College, Sian                                              | 60                     | 70              |
| Chinese Army Medical Field Service School (formerly Emergency Training Service) | 1                      |                 |
| Chinese Army Medical Research Institute                                         | 64                     |                 |
| Chinese Army Officers Language College                                          | 2                      |                 |
| Chinese Army Ordnance Administration, Headquarters                              | 8                      |                 |
| Chinese Army Ordnance Administration, 21st. Arsenal                             | 15                     |                 |
| Chinese Army Ordnance Administration, 23rd. Arsenal                             | 26                     |                 |
| Chinese Army Ordnance Administration, 44th. Arsenal                             | 35                     |                 |
| Chinese Army Ordnance Administration, 53rd. Arsenal                             | 3                      |                 |
| Chinese Army Ordnance Administration, Tatukou Iron & Steel Works                | 41                     | 11              |
| Chinese Army Veterinary College                                                 | 4                      |                 |
| Chinese Association of Labour                                                   | 20                     |                 |
| Chinese Industrial Cooperatives, Baillie Schools                                | 1                      |                 |
| Chinese Industrial Cooperatives, Men and Machines Office                        | 20                     |                 |
| Chinese Industrial Cooperatives, NW Federation                                  | 9                      | 8               |
| Chinese National Airways Corporation                                            | 82                     |                 |
| Chinling Mountains Forest Conservation Service                                  | 7                      |                 |
| Chungking Medical College                                                       | 1                      |                 |
| Chungking Dairy Co.                                                             | 2                      |                 |
| Chungking Municipal Health Bureau                                               | 5                      |                 |
| Chungking Municipal Hospital                                                    | 1                      |                 |
| Chungking University                                                            | 7                      |                 |
| Chungshan University                                                            | 6                      |                 |
| Chungtsen School                                                                | 130                    | 34              |
| Citrus Extension and Development Farm                                           | 23                     |                 |
| Commercial Press                                                                | 4                      |                 |
| Control Yuan                                                                    | 3                      |                 |
| Forest Products Research Institute                                              | 1                      |                 |
| Fukien Provincial Entomological Survey                                          | 42                     |                 |
| Fukien Provincial Meteorological Survey                                         | 7                      |                 |
| Fukien United University                                                        | 4                      | 14              |
| Futan University                                                                | 119                    |                 |
| Geological Survey of China                                                      | 81                     | 31              |
| Ginling (Women's) College                                                       | 8                      | 27              |
| Honan University                                                                | 2                      | 7               |
| Hsiangya Medical College                                                        | 11                     |                 |
| Huachung University                                                             | 28                     |                 |
| Huanan (Women's) College                                                        | 48                     | 15              |
| Huanghai Industrial Research Institute                                          | 13                     |                 |
| Hunan University                                                                | 17                     |                 |
| Hupei Provincial Medical College                                                | 44                     |                 |
| Institute of Hospital Technology                                                | 10                     |                 |
| International Broadcasting Station                                              | 22                     | 10              |
| Kansu Petroleum Administration                                                  | 18                     |                 |
| Kansu Provincial Bureau of Reconstruction                                       | 9                      | 2               |
| Kansu Science Education Institute                                               | 4                      |                 |
| Kuanghua Medium Temp. Coal Carbonisation Plant                                  | 13                     |                 |
| Kuangsi University                                                              | 11                     | 15              |
| Kweichow Provincial Glass Factory                                               | 3                      |                 |
| Kweichow Provincial Industrial Museum                                           | 2                      |                 |
| Kweichow Provincial Science Institute                                           | 3                      |                 |
| Kweichow University                                                             | 14                     |                 |
| Kweilin School of Drama                                                         | 138                    | 188             |
| Kweiyang Medical College                                                        | 30                     |                 |
|                                                                                 | 18                     | 70              |

|                                                        | Already transmitted | Now en route |
|--------------------------------------------------------|---------------------|--------------|
| Legislative Yuan                                       | 11                  |              |
| Lidien Low Temp. Lignite Carbonisation Plant           | 8                   | 19           |
| Lingnan University                                     | 29                  |              |
| Lunghai Railway Administration                         | 10                  |              |
| Mass Education Directorate                             | 1                   |              |
| Mienchu Hospital                                       | 3                   |              |
| Ministry of Agriculture, Headquarters                  | 3                   |              |
| see also: Agricultural Experiment Stations             |                     |              |
| Agricultural Extension Commission                      |                     |              |
| Animal Industry Research Station                       |                     |              |
| Central Forestry Research Bureau                       |                     |              |
| Chinling Mountains Forest Service                      |                     |              |
| National Agricultural Research Bureau                  |                     |              |
| Soil Conservation Experiment Station                   |                     |              |
| total                                                  | 122                 |              |
| Ministry of Economic Affairs                           |                     |              |
| see: Geological Survey of China                        |                     |              |
| Kansu Petroleum Administration                         |                     |              |
| National Industrial Research Bureau                    |                     |              |
| National Institute of Industrial Standards             |                     |              |
| National Resources Commission                          |                     |              |
| Ministry of Education                                  |                     |              |
| see: the Universities                                  |                     |              |
| Biological Specimens Mfg. Institute                    |                     |              |
| Central Political Training Institute                   |                     |              |
| Mass Education Directorate                             |                     |              |
| National Central Library                               |                     |              |
| National Central Technical College                     |                     |              |
| National College of Pharmacy                           |                     |              |
| National College of Social Education                   |                     |              |
| National Institute of Compilation and Translation      |                     |              |
| National Peiping Library                               |                     |              |
| National Polytechnic Colleges                          |                     |              |
| Ministry of Food, Headquarters                         | 1                   |              |
| Ministry of Information, Headquarters                  | 1                   |              |
| Ministry of Information, School of Journalism          | 1                   |              |
| Ministry of Social Affairs                             | 1                   |              |
| Ministry of War                                        |                     |              |
| see: Chinese Air Force                                 |                     |              |
| Chinese Army                                           |                     |              |
| Central Land Survey School                             |                     |              |
| Nankai Institute of Economics                          | 23                  |              |
| Nanking University                                     | 25                  | 56           |
| National Agricultural Research Bureau                  | 56                  |              |
| National Central Library                               | 28                  | 34           |
| National Central Technical College                     | 84                  |              |
| National Central University                            | 180                 |              |
| National College of Pharmacy                           | 2                   |              |
| National College of Social Education                   | 24                  |              |
| National Epidemic Prevention Bureau, Kunming           | 12                  | 34           |
| National Epidemic Prevention Bureau, Lanchow           | 13                  | 61           |
| National Health Administration, Headquarters           | 6                   | 25           |
| see also: Hospitals                                    |                     |              |
| National Epidemic Prevention Bureau                    |                     |              |
| National Institute of Health                           |                     |              |
| National Hydraulic Engineering Research Institute      | 2                   |              |
| National Industrial Research Bureau, Chungking         | 53                  | 63           |
| National Industrial Research Bureau, Lanchow           | 1                   |              |
| National Institute of Research in Chinese Architecture | 8                   |              |
| National Institute of Compilation and Translation      | 44                  | 15           |
| National Institute of Health (Medical Research)        | 25                  | 106          |

## LIST V

Chinese Scientific and Technical Institutions for which equipment, apparatus and reagents have been obtained from India in the Science Supplies Service.

(See List II of First Report)

| No.     | Institution                                         | Location     |
|---------|-----------------------------------------------------|--------------|
| 79      | West China Union University, Biological Department  | Chengt       |
| 80      | Southwest Associated University, Geological Dept.   | Kunming      |
| 81      | Central Automotivé Parts Mfg. Works                 | Hualongchiao |
| 82      | Yunnan University, Embryological Department         | Kunming      |
| 83      | Forest Products Research Institute                  | Chiating     |
| 84      | Chungking University, Chemistry Department          | Shapingba    |
| 85      | Huahsin Electro-metallurgical Works                 | Hualongchiao |
| 86      | Peiping Academy, Institute of Physics               | Heilongtang  |
| 87      | West China Union University, Chemistry Department   | Chengt       |
| 88      | West China Union University, Pharmacy School        | Chengt       |
| 89      | West China Union University, Hospital               | Chengt       |
| 90      | Yenching University, Dept. of Physics               | Chengt       |
| 91      | Chinghua University General Physiol. Research Inst. | Tapuchi      |
| 92      | CIC, Headquarters, for Baillie Technical Schools    | Chungking    |
| 93      | Lingnan University Medical College                  | Kukong       |
| 94      | Lingnan University Medical College, Pathol. Dept.   | Kukong       |
| 95      | Academia Sinica, Institute of Zoology               | Beipei       |
| 96      | CIC Baillie Technical School                        | Chengt       |
| 97      | CIC Baillie Technical School                        | Lanchow      |
| 98      | CIC Baillie Technical School                        | Shuangshihpu |
| 99      | CIC Men and Machines Office                         | Chengt       |
| 100     | CIC Baillie Technical School                        | Shandan      |
| 101     | CIC Mining Office                                   | Shuangshihpu |
| 102     | CIC Baillie School                                  | Lanchow      |
| 103-107 | Lingnan University Agricultural College             | Pingshek     |
| 108     | Amoy University, Department of Physics              | Changting    |
| 109     | Amoy University, Department of Zoology              | Changting    |
| 110     | Amoy University, Department of Chemistry            | Changting    |
| 111     | Kuangsi Provincial Agricultural Experiment Station  | Shatang      |
| 112     | Kuangsi University, Department of Chemistry         | Liangfeng    |
| 113     | Kuangsi Agric. Exp. Station (Dept. of Agric. Chem.) | Shatang      |
| 114     | Kuangsi Science Institute                           | Liangfeng    |
| 115     | Fukien Provincial Geological and Soil Survey        | Yungan       |
| 116     | Chungshan University, Dept. of Biology              | Pingshek     |
| 117-123 | Chungshan University Agricultural College           | Liyuanbao    |
| 124     | Pingkuei Mining Administration                      | Bapu         |
| 125     | Fukien Provincial Entomological Survey              | Shaowu       |
| 126     | Fukien United University, Clinical Laboratory       | Shaowu       |
| 127     | Fukien United University, Agronomy Department       | Shaowu       |
| 128-138 | Chungshan University Medical College                | Lochang      |
| 139     | Mienchu Hospital Clinical Laboratory                | Mienchuhsien |
| 140     | Southwest Associated University, Psychology Dept.   | Kunming      |
| 141     | Yutsai School                                       | Beiwenchuan  |
| 142-143 | Academia Sinica, Geological Institute               | Liangfeng    |
| 144     | Natural Science Society of China                    | Chungking    |
| 145     | Huanan (Women's) College                            | Nanping      |
| 146     | Hsiangya Medical College                            | Kweiyang     |
| 147     | Kweichow Provincial Glass Factory                   | Kweiyang     |
| 148     | Kweiyang Medical College                            | Kweiyang     |

Wireless World  
Zinc Development Association Abstracts  
Zinc Development Association Report

*General Journals*

Advancement of Science  
Agenda  
Antiquity  
Asiatic Review  
British Book News  
British Journal of Educational Psychology  
British Journal of Psychology  
Bulletin of International Affairs  
Bulletin of the School of Oriental and African Studies  
Discovery  
Economica  
The Economic Historical Review  
Economic Journal  
Endeavour  
Fortnightly  
Hibbert Journal  
Horizon  
International Affairs  
Geography  
Geographical Magazine  
Geographical Journal  
Man  
Mind  
Nature  
Philosophy  
Plan  
Planning  
Political Quarterly  
Review of Economic Studies  
School Science Review  
Sociology Review

Journal of the Chemical Society  
Journal of Glass Technology  
Journal of the Institution of Automobile Engineers  
Journal of the Institution of Electrical Engineers (I, II, III)  
Journal of the Institute of Fuels  
Journal of the Institution of Mechanical Engineers  
Journal of the Iron & Steel Institute  
Journal of the London Mathematical Society  
Journal of the Royal Aeronautical Society  
Journal of the Royal Sanitary Institute  
Journal of the Royal Statistical Society  
Journal of Scientific Instruments  
Journal of the Society of Chemical Industry  
Journal of the Society of Dyers & Colourists  
Journal of the Textile Institute  
Light Metals  
Manufacturing Chemist  
Mathematical Gazette  
Mechanical Handling  
Mechanical World  
Metallurgia  
Metropolitan-Vickers Gazette  
Modern Transport  
Monthly Bulletin & Abstracts of the British Coal Utilisation  
Research Association  
Monthly Notices of the Royal Astronomical Society  
Motor Ship  
Observatory  
Official Architect & Planning Review  
Oil Engine  
Overseas Engineer  
Paint  
Petroleum  
Philosophical Magazine  
Physics Abstracts  
Plastics  
Proceedings of the Cambridge Philosophical Society  
Proceedings of the Edinburgh Mathematical Society  
Proceedings of the Institution of Mechanical Engineers  
Proceedings of the London Mathematical Society  
Proceedings of the Physical Society  
Proceedings of the Royal Society (A)  
Proceedings of the Royal Society of Edinburgh (A)  
Proceedings of the South Wales Institute of Engineers  
Quarterly Journal of the Geological Society  
Quarterly Journal of Mathematics  
Quarterly Journal of the Royal Meteorological Society  
Railway Gazette  
Royal Engineers' Journal  
Science Comment  
Sheet Metal Industries  
Shipbuilder & Marine Enginebuilder  
Shipbuilding & Shipping Record  
Steam Engineer  
Textile Manufacturer  
Textile Recorder  
Titles & References of Articles from Publications  
Trade & Engineering (The Times)  
Transactions of the Faraday Society  
Transactions of the Institution of Mining Engineers  
Water & Water Engineering  
Welding  
Wireless Engineer

Plant Breeding Abstracts  
 Proceedings of the Royal Entomological Society  
 Proceedings of the Royal Society (B)  
 Proceedings of the Royal Society of Edinburgh (B)  
 Proceedings of the Royal Society of Medicine  
 Proceedings of the Zoological Society of London  
 Quarterly Journal of Experimental Physiology  
 Quarterly Journal of Forestry  
 Quarterly Journal of Medicine  
 Quarterly Journal of Microscopical Science  
 Quarterly Journal of Pharmacy & Pharmacology  
 Review of Applied Entomology (A)  
 Review of Applied Entomology (B)  
 Review of Applied Mycology  
 Scottish Journal of Agriculture  
 Soils and Fertilizers  
 Transactions of the Royal Entomological Society of London  
 Transactions of the Royal Society of Edinburgh  
 Transactions of the Royal Society of Tropical Medicine & Hygiene  
 Tropical Agriculture  
 Tubercle  
 Veterinary Bulletin

*Engineering, Chemical, Physical, & Mathematical Journals*

Aeronautics  
 Aircraft Engineering  
 Aircraft Production  
 Analyst  
 Annual Report of the Chemical Society  
 Annual Report of the British Cast Iron Research Association  
 Architects' Journal  
 Automobile Engineer  
 Bibliography of Meteorological Literature  
 British Chemical & Physiological Abstracts (A1, A2, B1, B2, & C)  
 British Plastics  
 Building  
 Bulletin of Foundry Abstracts  
 Cambridge Tracts in Mathematics & Mathematical Physics  
 Chemical Age  
 Chemical Trade Journal & Chemical Engineer  
 Civil Engineering  
 Commercial Motor  
 Concrete Building & Concrete Products  
 Dyer  
 Electrical Engineering Abstracts  
 Electrical Review  
 Electrical Times  
 Electrician  
 Engineer  
 Engineering  
 Flight  
 Foundry Trade Journal  
 Fuel  
 Geological Magazine  
 Heating & Ventilating Engineer & Journal of Air Conditioning  
 Highways, Bridges and Aerodromes  
 Industrial Chemist  
 Industry (India)  
 International Industry  
 Iron & Coal Trade Review  
 Iron & Steel  
 Journal of the British Astronomical Association

L I S T I V

British Learned and Technical Journals sent to Chungking  
 for distribution in actual copies

*Biological & Medical Journals*

Agriculture  
 Animal Breeding Abstracts  
 Annals of Applied Biology  
 Annals of Botany  
 Annals of Eugenics  
 Annals of Tropical Medicine & Parasitology  
 Biochemical Journal  
 Biological Reviews  
 Biomctrika  
 Brain  
 Botanical Magazine  
 British Chem. & Physiol. Abstracts (A3)  
 British Chem. & Physiol. Abstracts (B3)  
 British Dental Journal  
 British Medical Journal  
 British Journal of Experimental Pathology  
 British Journal of Surgery  
 Bulletin of Entomological Research  
 Bulletin of War Medicine  
 Dairy Science  
 Empire Journal of Experimental Agriculture  
 Eugenic Review  
 Empire Cotton Growing Review  
 Food Manufacture  
 Forestry Abstracts  
 Helminthological Abstracts  
 Herbage Abstracts  
 Horticultural Abstracts  
 Hospital & Nursing Home Management  
 Index Veterinarius  
 Journal of Agricultural Science  
 Journal of Anatomy  
 Journal of Ecology  
 Journal of Endocrinology  
 Journal of Experimental Biology  
 Journal of Genetics  
 Journal of Heredity  
 Journal of Hygiene  
 Journal of the Linnean Society  
 Journal of Obstetrics & Gynaecology  
 Journal of Pathology & Bacteriology  
 Journal of Physiology  
 Journal of the Royal Anthropological Institute  
 Journal of the Royal Army Medical Corps  
 Journal of the Royal Horticultural Society  
 Journal of the Royal Microscopical Society  
 Lancet  
 New Phytologist  
 Nutrition Abstracts and Reviews  
 Parasitology  
 Pharmaceutical Journal

Proceedings of the Institution of Automobile Engineers  
 Proceedings of the Institution of Mechanical Engineers  
 Proceedings of the London Mathematical Society  
 Proceedings of the Physical Society  
 Proceedings of the Royal Entomological Society of London (A & B)  
 Proceedings of the Royal Society (A & B)  
 Proceedings of the Royal Society of Edinburgh (B)  
 Proceedings of the Zoological Society of London  
 Public Administration  
 Quarterly Journal of Experimental Physiology  
 Quarterly Journal of Forestry  
 Quarterly Journal of the Geological Society of London  
 Quarterly Journal of Mathematics  
 Quarterly Journal of Medicine  
 Quarterly Journal of Pharmacy & Pharmacology  
 Quarterly Journal of the Royal Meteorological Society  
 Report on Progress in Physics  
 Review of Economic Studies  
 Sociological Review  
 Soils and Fertilizers  
 Review of Applied Mycology  
 Review of Applied Entomology (A & B)  
 Titles & References of Articles & Papers selected from Publications (British Council)  
 Transactions of the Faraday Society  
 Transactions of the Institute of Mining Engineering  
 Transactions of the Royal Society of Edinburgh  
 Transactions of the Royal Society of Tropical Medicine & Hygiene  
 Transactions of the Royal Entomological Society of London  
 Tubercle  
 Wireless Engineer  
 Wireless World  
 Veterinary Bulletin

Geological Magazine  
 Heating and Ventilating Engineer & Journal of Air Conditioning  
 Helminthological Abstracts  
 Herbage Abstracts  
 Index Veterinarius  
 International Industry  
 Iron and Steel  
 Journal of Agricultural Science  
 Journal of the Chemical Society  
 Journal of Ecology  
 Journal of Education  
 Journal of Endocrinology  
 Journal of Experimental Biology  
 Journal of Genetics  
 Journal of Hygiene  
 Journal of the Institution of Automobile Engineers  
 Journal of the Institution of Civil Engineers  
 Journal of the Institution of Electrical Engineers (General & Power)  
 Journal of the Institution of Electrical Engineers (Wireless)  
 Journal of the Institute of Fuel  
 Journal of the Institution of Mechanical Engineers  
 Journal of the Institution of Sanitary Engineers  
 Journal of the Iron and Steel Institute  
 Journal of the Linnean Society  
 Journal of the London Mathematical Society  
 Journal of Obstetrics and Gynaecology  
 Journal of Pathology & Bacteriology  
 Journal of the Royal Aeronautical Society  
 Journal of the Royal Anthropological Institute  
 Journal of the Royal Horticultural Society  
 Journal of the Royal Sanitary Institute  
 Journal of the Royal Statistical Society  
 Journal of Scientific Instruments  
 Journal of the Society of Chemical Industry  
 Journal of the Society of Dyers and Colourists  
 Journal of the Society of Glass Technologists  
 Journal of the Textile Institute  
 Kinematography Weekly  
 Man  
 Manufacturing Chemist  
 Mathematical Gazette  
 Mechanical Handling  
 Mechanical World  
 Metropolitan-Vickers Gazette  
 Mind  
 Modern Language Review  
 Monthly Notices of the Royal Astronomical Society  
 Monthly Science News (British Council)  
 Nature  
 New Phytologist  
 Nutrition Abstracts and Reviews  
 Observatory  
 Patent Manufacture  
 Parasitology  
 Philosophical Magazine and Journal of Science  
 Philosophy  
 Physical Abstracts  
 Planning  
 Plant Breeding Abstracts  
 Political Quarterly  
 Post-War Sanitary Engineering Problems  
 Proceedings of the Cambridge Philosophical Society  
 Proceedings of the Edinburgh Mathematical Society

I  
 B  
 A  
 O  
 B  
 D  
 I  
 U  
 I  
 n  
 I  
 wes

## LIST III

British Learned and Technical Journals sent to  
Chungking in Microfilm Form  
(See List III of First Report)

Abstracts from the Scientific and Technical Press (British Council)  
 Animal Breeding Abstracts  
 Agenda  
 Analyst  
 Annals & Magazine of Natural History  
 Annals of Applied Biology  
 Annals of Botany  
 Annals of Tropical Medicine & Parasitology  
 Annual Reports on the Progress of Chemistry  
 Annual Reports on the Progress of Applied Chemistry  
 Antiquity  
 Asiatic Review  
 Automobile Engineer  
 Bibliography of Meteorological Literature  
 Biochemical Journal  
 Biological Reviews  
 Biometrika  
 Botanical Magazine  
 Brain  
 British Book News  
 British Chemical & Physiological Abstracts (Organic Chemistry)  
 British Chemical & Physiological Abstracts (Inorganic Chemistry)  
 British Chemical & Physiological Abstracts (Industr. Agric. Foods. Sanit. etc.)  
 British Journal of Educational Psychology  
 British Journal of Experimental Pathology  
 British Journal of Psychology  
 British Medical Journal  
 British Plastics and Moulded Products Trader  
 Bulletin & Foundry Abstracts of the British Cast Iron Research Association  
 Bulletin of Entomological Research  
 Bulletin of the School of Oriental & African Studies  
 Cambridge Mathematical Tracts  
 Discovery  
 Dairy Science Abstracts  
 Economica  
 Economic Journal  
 Electrical Engineering Abstracts  
 Electrical Review  
 Electrician  
 Encyclopaedia  
 Engineer  
 Engineering  
 Eugenics Review  
 Flight  
 Food Manufacture  
 Forestry Abstracts  
 Foundry Trade Journal  
 Fuel in Science & Practice  
 Geographical Journal  
 Geographical Magazine  
 Geography

Yenching University  
 Yunnan Botanical Institute  
 Yunnan English Language Training College  
 Yunnan University  
 Yungli Chemical Works Research Section  
 Yutsai School

| Already transmitted | Now en route |
|---------------------|--------------|
| 99                  |              |
| 5                   |              |
| 8                   |              |
| 163                 |              |
| 8                   | 44           |
| 11                  |              |
| 4649                | 1959         |

Total

6608

Unallocated

167

Grand Total

6775

|                                                                            | Already transmitted | Now en route |
|----------------------------------------------------------------------------|---------------------|--------------|
| National Institute of Industrial Standardisation                           | 1                   |              |
| National Museum                                                            | 4                   |              |
| National Peiping Library                                                   | 14                  | 26           |
| National Polytechnic College, Chiating                                     | 13                  |              |
| National Polytechnic College, Tzeliuching                                  | 1                   |              |
| National Resources Commission, Central Electrical Wks.                     | 12                  | 25           |
| National Resources Commission, Central Machine Wks.                        | 1                   |              |
| National Resources Commission, Central Mineral Exploitation Bureau         | 2                   |              |
| National Resources Commission, Central Radio Wks.                          | 6                   |              |
| National Resources Commission, Chemical Wks.                               | 4                   |              |
| National Resources Commission, Committee on Industry & Mining in Kansu     | 6                   |              |
| National Resources Commission, Copper Refineries                           | 22                  |              |
| National Resources Commission, Electrochemical & Metallurgical Wks.        | 16                  |              |
| National Resources Commission, Headquarters                                | 6                   | 5            |
| National Resources Commission, Hydroelectric Wks.                          | 9                   |              |
| National Resources Commission, Kansu Machine Wks.                          | 108                 |              |
| National Resources Commission, Low Temp. Carbonisation Plant               | 1                   |              |
| National Resources Commission, Tungli Oil Works                            | 1                   |              |
| National Resources Commission, Weiyuan Iron Wks.                           | —                   | 9            |
| National Resources Commission, Yunnan Iron & Steel Wks.                    | 3                   |              |
| National Resources Commission, total                                       | 197                 |              |
| National School of Drama                                                   | —                   | 30           |
| Natural Science Society of China                                           | 2                   |              |
| Northeast University                                                       | 3                   |              |
| Northwest Agricultural College                                             | 17                  |              |
| Northwest Engineering College                                              | 38                  | 45           |
| Northwest Hospital                                                         | 5                   |              |
| Northwest Medical College                                                  | 16                  |              |
| Northwest Normal (Teachers' Training) College                              | 6                   |              |
| Northwest University                                                       | 4                   | 17           |
| Northwest Veterinary & Epizootic Prevention Bureau                         | 18                  |              |
| Peiping Union Medical College Nursing School                               | 5                   |              |
| Robertson Memorial Hospital, Sian                                          | 7                   |              |
| Science Society of China                                                   | 5                   | 7            |
| Shanghai Medical College                                                   | 55                  |              |
| Shensi Provincial Medical College                                          | 4                   |              |
| Shukuang Middle School, Tzeliuching                                        | 6                   | 47           |
| Sino-British Cultural Association                                          | 7                   | 13           |
| Sino-Indian Cultural Association                                           | 3                   |              |
| Soil Conservation Experiment Station                                       | 45                  |              |
| Southwest Associated University (Peiching, Chinghua & Nankai Universities) | 239                 | 29           |
| Southwest Highways Administration                                          | 7                   |              |
| Sun Yat-Sen Institute of Cultural Studies                                  | 10                  |              |
| Sun Yat-Sen University: see Chungshan University                           | 6                   |              |
| Szechuan Provincial Agricultural Experiment Station                        | 8                   |              |
| Szechuan Provincial Bureau of Education                                    | 22                  | 5            |
| Szechuan University                                                        | 1                   | 24           |
| Tienfu Coalmining Administration                                           | 15                  | 20           |
| Tongchi University                                                         | —                   | 31           |
| Tzeshu Iron & Steel Works                                                  | 1                   |              |
| Union Drug Company Research Section                                        | 100                 |              |
| University of Communications                                               | —                   | 36           |
| Weichang Textile Company Research Section                                  | 220                 | 89           |
| West China Union University                                                | 93                  | 8            |
| Wuhan University                                                           |                     |              |

|                                                                        |              |
|------------------------------------------------------------------------|--------------|
| 149-152 Fukien United University, Physics Department                   | Changting    |
| 153-154 Peiping Academy, Institute of Physics                          | Heilongtang  |
| 155 National Epidemics Prevention Bureau                               | Hsishan      |
| 156 Chinghua University, Nutritional Science Dept.                     | Kunming      |
| 157-158 Chinghua University, Radio Research Institute                  | Tapuchi      |
| 159-160 AOA, 53rd. Arsenal                                             | Haikou       |
| 161-162 Chinghua University, General Physiol. Res. Inst.               | Tapuchi      |
| 163-164 Peiping Academy, Dept. of Geophysics                           | Heilongtang  |
| 165 Academia Sinica, Astronomical Observatory                          | Yangfangwa   |
| 166 NRC Electrical Factory                                             | Magaidze     |
| 167-168 NRC Chemical Works                                             | Magaidze     |
| 169 AOA, 53rd. Arsenal                                                 | Haikou       |
| 170 Chinghua University, Census and Statistics Res. Inst.              | Chienkung    |
| 171-176 NRC, Copper Refinery and Aluminium Factory                     | Magaidze     |
| 177 AOA, 21st. Arsenal                                                 | Anning       |
| 178-179 Hsiangya Medical College                                       | Kweiyang     |
| 180-183 All-China Institute of Developmental Psychology and Physiology | Beipei       |
| 184-200 General distribution orders                                    |              |
| 201 Huachung University, Dept. of Physics                              | Hsichow      |
| 202-203 Southwestern Associated University, Dept. of Physics           | Kunming      |
| 204-205 AOA, 23rd. Arsenal                                             | Magaidze     |
| 206-208 NRC, Chemical Works                                            | Magaidze     |
| 209-211 Peiping Academy, Institute of Materia Medica                   | Kunming      |
| 212 Yunnan Provincial Tanning Works                                    | Kunming      |
| 213-215 Academia Sinica, Institute of Engineering                      | Kunming      |
| 216-219 Academia Sinica, Institute of Chemistry                        | Kunming      |
| 220 Chinghua University, General Physiol. Res. Inst.                   | Tapuchi      |
| 221 Huaching University, Limnological Research Station                 | Hsichow      |
| 222 Hsiangya Medical College                                           | Kweiyang     |
| 223 Southwest Associated University, Dept. of Botany                   | Kunming      |
| 224-231 Ministry of Educ. Research Inst. Exp. Med & Pharm.             | Kunming      |
| 232-233 NRC, Electrical Factory                                        | Magaidze     |
| 234 Lidien Low Temp. Lignite Carbonisation Plant                       | Fengmingtsun |
| 235 Southwest Associated University, Dept. of Physics                  | Kunming      |
| 236 National Central University Medical College                        | Chengtu      |
| 237-239 Kweichow University                                            | Huachi       |
| 240 Kweichow University, Department of Anthropology                    | Huachi       |
| 241 AOA, 21st. Arsenal                                                 | Chungking    |
| 242-244 Chekiang University, College of Agriculture                    | Meitan       |
| 245 CIC, Hanchung Hospital Laboratory                                  | Hanchung     |
| 246 Northwestern Agricultural Experiment Station                       | Wukung       |
| 247 Kweichow University, Dept. of Chemistry                            | Huachi       |
| 248 AOA, 44th. Arsenal                                                 | Chungtsaosse |
| 249 Kuanghua Medium Temp. Coal Carbonisation Plant                     | Pingyi       |
| 250-253 Chekiang University Research Departments                       | Meitan       |
| 254 All-China Institute of Sericulture                                 | Tsunyi       |
| 255 Kweichow University, Dept. of Physics                              | Huachi       |
| 256-262 Chekiang University Agricultural College Depts.                | Meitan       |
| 263 Kuanghua Medium Temp. Coal Carbonisation Plant                     | Pingyi       |
| 264 AOA, 53rd. Arsenal                                                 | Haikou       |
| 265 Peiping Academy, Dept. of Physical Chemistry                       | Heilongtang  |
| 266-267 Chekiang University, Dept. of Physics                          | Meitan       |
| 268-273 National Central University Medical College                    | Chengtu      |
| 269 Fukien Provincial Meteorological Survey                            | Yungan       |
| 270 Chekiang University, Dept. of Pharmacology                         | Meitan       |
| 271 AOA, 23rd. Arsenal                                                 | Magaidze     |
| 272 Chekiang University Normal (Teachers' Training) College            | Meitan       |
| 274-275 NRC Electrochemical & Metallurgical Works                      | Sanchi       |
| 276 National Industrial Research Bureau Laboratories                   | Beipei       |
| 277 CIC, Headquarters                                                  | Chungking    |
| 278 Peiping Academy, Optical Instruments Division                      | Heilongtang  |

279 Chekiang University, Dept. of Pharmacology  
 280-281 National Central Univ. Med. Coll. Biochem. Dept.  
 282-284 Tzeshu Iron and Steel Works  
 285-286 Futan University, Depts. of Biology and Chemistry  
 287-288 Chekiang University, Dept. of Pharmacology  
 289-293 Futan University, Dept. of Physics  
 294 National Central Univ. Med. Coll. Dept. of  
 Phatmacol.  
 295 NRC, Ceramics and Insulator Factory  
 296 All-China Instit. of Developmental Psychol. &  
 Physiol.  
 297 NRC Tzuchung Power Alcohol Factory  
 298 Child Welfare Training Program Committee  
 299 Futan University, Dept. of Chemistry  
 300-301 Chinghua University, General Physiology Research  
 Inst.  
 302 National Central University, Agric. Chemistry Dept.  
 303 Academia Sinica, Institute of Experimental Medicine  
 304 Central Automotive Parts Wks. Technical Training  
 Sch.  
 305 Geological Survey of China  
 306-308 Academia Sinica, Institute of Botany  
 309 Chiangu Provincial Medical College, Parasitol. Dept.  
 310 NRC, Central Radio Mfg. Works  
 311 National Central University Medical College  
 312 Central Hospital Clinical Laboratory  
 313 Army Medical College, Institute of Pharmaceutics  
 314 Wuhan University, Fuel Research Laboratory  
 315 West China Union University, Dept. of Mathematics  
 316 Northwest Epidemics Prevention Bureau  
 317 Geological Survey of China  
 318-319 Army Medical College, Serology Research Institute  
 320-321 Chinese Air Force Research Bureau Experiment Sta.  
 322 Academia Sinica, Institute of Physical Anthropology  
 323 Huachung University, Dept. of Chemistry  
 324-325 CIC Minerals Prospecting Office  
 326 CIC Baillie Technical School  
 327 West China Union University, School of Pharmacy  
 328 Academia Sinica, Institute of Physics  
 329 CIC Men and Machines Office  
 330 National Agricultural Research Bureau  
 331 Shanghai Medical College, Dept. of Pathology  
 332 Chekiang University, Dept. of Physiol. and  
 Pharmacol.  
 333 West China Union University, Dept. of Animal  
 Husbandry

Meitan  
 Chengtu  
 Chungking  
 Beipei  
 Meitan  
 Beipei

Chengtu  
 Ipin

Beipei  
 Neichiang  
 Chungking  
 Beipei

Tapuchi  
 Chungking  
 Koloshan

Chungking  
 Beipei

Beipei  
 Beipei  
 Shapingba  
 Chengtu  
 Chungking

Anshun  
 Chiating  
 Chengtu  
 Lanchow  
 Beipei

Anshun  
 Chengtu  
 Lichuang  
 Hsichow  
 Shandan  
 Shandan  
 Chengtu  
 Beipei  
 Chengtu  
 Beipei  
 Koloshan

Meitan  
 Chengtu

SPECIAL ORDERS

1 Chekiang University, Dept. of Biochemistry  
 2 Shanghai Medical College, Physiological Dept.  
 3 Army Medical College, Nutritional Sci. Research  
 Inst.  
 4 All-China Institute of Development Psychol. &  
 Physiol.  
 5 Kuangsi University, Dept. of Chemistry  
 6 National Central University, Dept. of Physics  
 7 Huanghai Industrial Research Institute  
 8 Nanking University, Dept. of Chemistry  
 9 Wuhan University, Dept. of Physics  
 10 Szechuan University, Dept. of Agronomy  
 11 Academia Sinica, Institute of Chemistry  
 12-14 West China Union University departments  
 15 Academia Sinica, Institute of Zoology and Botany

Meitan  
 Koloshan  
 Anshun  
 Beipei  
 Liangfeng  
 Shapingba  
 Wutongchiaio  
 Chengtu  
 Chiating  
 Chengtu  
 Kunming  
 Chengtu  
 Beipei

16 AOA, 23rd. Arsenal Research Laboratories  
 17-18 Lingnan University Medical College  
 19 West China Union University, Dept. of Physiology  
 20 Yenching University, Dept. of Physics  
 21 Academia Sinica, Institute of Zoology  
 22 Southwest Associated University, Dept. of Geology  
 23 Geological Survey of China  
 24 Huahsin Electro-metallurgical Works  
 25 Fukien United University, Dept. of Physics  
 26 National Central University, Dept. of Biology  
 27 National Epidemics Prevention Bureau branch  
 28 Kweiyang Medical College  
 29 Fukien United University, Dept. of Physics  
 30 United Hospital of the Associated Universities  
 31 AOA, 53rd. Arsenal  
 32 Chinghua University, General Physiology Research  
 Inst.  
 33 NRC, Copper Refineries  
 34 Hsiangya Medical College  
 35-36 AOA, 23rd. Arsenal, branch  
 37 Southwest Associated University, Dept. of Botany  
 38-40 Southwest Associated University, Dept. of Physics  
 39-46 National Central University Medical College  
 41-44 Chekiang University research departments  
 45 Chekiang University, Coll. of Ag. Dept. of  
 Sericulture  
 47 NRC Electrochemical and Metallurgical Works  
 48 National Central University, Dept. of Physics  
 49-50 National Central Univ. Med. College, Dept. of  
 Physiology  
 51 Futan University, Dept. of Chemistry  
 52-53 Chekiang University, Depts. of Physiol. &  
 Pharmacol.  
 54 West China Union University, Dept. of Physiology  
 56 National Central University Medical College  
 57-58 Chinghua University General Physiology Research  
 Inst.  
 59 National Central Univ. Dept. of Agricultural Chem-  
 istry  
 60 Shanghai Medical College, Dept. of Physiology  
 61-63 Geological Survey of China  
 64 Academia Sinica, Institute of Botany  
 65 Chiangu Pfovincial Medical College, Dept.  
 of Parasitol.  
 66 Army Medical College, Institute of Pharmaceutics  
 67 Geological Survey of China

Luh sien  
 Kukong  
 Chengtu  
 Chengtu  
 Beipei  
 Kunming  
 Beipei  
 Hualongchiaio  
 Shaowu  
 Shapingba  
 Kweiyang  
 Kweiyang  
 Shaowu  
 Chengtu  
 Haikou

Tapuchi  
 Magaidze  
 Kweiyang  
 Magaidze  
 Kunming  
 Kunming  
 Chengtu  
 Meitan

Meitan  
 Sanchi  
 Shapingba

Chengtu  
 Beipei

Meitan  
 Chengtu  
 Chengtu

Tapuchi

Shapingba  
 Koloshan  
 Beipei  
 Beipei

Beipei  
 Anshun  
 Beipei

## LIST VI

Original Papers by Chinese Scientists  
and others transmitted for publication in the West

(See List VI of First Report)

| No. | Title                                                                                                                                 | Author                                     | Origin                                      | Western Journal             |
|-----|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------|-----------------------------|
| 24  | Sodium Sulphate as an Agent causing the development of Chloride-secreting cells in <i>Macropodus</i>                                  | Liu Chien-Kang                             | Acad. Sin. (Zool.)                          | Nature                      |
| 25  | Synthesis of Hydrocarbon Lubricants from Vegetable Oils                                                                               | Sun Tsun-Chueh, Chin Tao-Seng & D. Y. Hsia | NRC, Tungli Oil Wks.                        | Industr. & Eng. Chem.       |
| 26  | The Constitution of Belmacangenin and Belmacandin                                                                                     | Wang Hsiu & Hu Mei                         | Peiping Acad. Chem. Inst.                   | Journ. Chem. Soc.           |
| 27  | On Torsion of a Crescent-sectioned Prism                                                                                              | Ling Chi-Ping, Tan Hao-Seng & Huang Keh-Li | Ch. Air Force Res. Bur. Exp. Sta.           | Journ. Royal Aeronaut. Soc. |
| 28  | The Essentiality of Manganese and other micro-elements in plant growth as compared with the effect of Indolacetic Acid and Colchicine | Lo Tsung-Lo                                | Chkiang Univ. Bot. Dept.                    | Ann. of Bot.                |
| 29  | On the Occurrence of <i>Colletotrichum capsici</i> in China                                                                           | Ling Li & Ling Rju-Shen                    | Szech. Prov. Ag. Exp. Sta.                  | Indian Journ. Agric. Sci.   |
| 30  | Factors affecting the development of Cotton Diseases                                                                                  | Ling Li                                    | -do-                                        | Ann. Appl. Biol.            |
| 31  | Studies on Wood-Boring Insects in China, I, Biology and Control of the Citrusroot Cerambycid <i>Melanaster sinensis</i> (Coleoptera)  | Liu Chun-O                                 | Szechuan Univ.                              | ?                           |
| 32  | A Thermolabile Accessory Growth-Factor for <i>Rhizobium</i>                                                                           | Chen Hua-Kuei                              | Nat. Bur. Ag. Res.                          | Nature                      |
| 33  | Larval Development of some Peiping Caridae                                                                                            | Shen Shih-Rjui                             | SW Assoc. Univ.                             | ?                           |
| 34  | Insecticidal Plants in SW China                                                                                                       | Chao Shan-Huan                             | Chungshan Univ. Agric. Coll.                | ?                           |
| 35  | Industrial Cooperatives in NW China                                                                                                   | Rewi Alley                                 | CIC, NW Federation                          | ?                           |
| 36  | see no. 27 above, Part II                                                                                                             |                                            |                                             |                             |
| 37  | Rural Economy in Yunnan                                                                                                               | Hsu Lang-Kuang                             | Yunnan Univ. Instit. of Social Anthropology | Nature                      |
| 38  | The Problem of Introducing Scientific                                                                                                 | Hsu Lang-Kuang                             | -do-                                        | -do-                        |

| No. | Title                                                                                                                                | Author                                           | Origin                                         | Western Journal                                 |
|-----|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------|-------------------------------------------------|
|     | Medicine into a Rustic Community                                                                                                     |                                                  |                                                |                                                 |
| 39  | Biology in Wartime China                                                                                                             | Tang Pei-Sung                                    | Chinghua Univ. General Physiol. Research Inst. | -do-                                            |
| 40  | A Simple Electric Heater for Thermostat baths                                                                                        | Lou Cheng-Hou & Chen Shao-Lin                    | -do-                                           | Journ. Sci. Instruments                         |
| 41  | Bamboo, Mud and Granite (an account of the work of CIC hospitals)                                                                    | Fritz Jensen                                     | CIC                                            | ?                                               |
| 42  | A Lagoon in the Backwaters of an Estuary                                                                                             | Liu En-Lan                                       | Ginling Coll. Geogr. Dept.                     | Geogr. Mag.                                     |
| 43  | Children of Eden                                                                                                                     | Liu En-Lan                                       | -do-                                           | -do-                                            |
| 44  | Integration and Absolute Summability of Fourier Series                                                                               | K. K. Chen                                       | Chekiang Univ. Maths. Research Instit.         | —                                               |
| 45  | The Ideological Defeat of Fascism                                                                                                    | Fritz Jensen                                     | CIC                                            | —                                               |
| 46  | Stresses in a Perforated Strip Containing a series of Circular Holes under Tension                                                   | Ling Chih-Ping, Wang Pei-Shang & Ching Kuan-Seng | Chinese Air Force Research Bureau Exp. Sta.    | J. Royal Aero-naut Soc.                         |
| 47  | A Note on the Hamiltonian Theory of Quantisation                                                                                     | Chang Tsung-Sui                                  | Nat. Central Univ. Dept. of Physics            | Proc. Roy. Soc.                                 |
| 48  | On Clifford's Algebra                                                                                                                | Li Hua-Chung                                     | Wuhan Univ.                                    | Journ. London Math. Soc. American Journ. Maths. |
| 49  | Even-dimensional Skew Metric Spaces and their Groups of Transformation                                                               | Li Hua-Chung                                     | -do-                                           | —                                               |
| 50  | Continuous Representations of the Multiplicative Group of Complex Numbers                                                            | Li Hua-Chung                                     | -do-                                           | Bull. Amer. Math. Soc.                          |
| 51  | On Unitary Geometry                                                                                                                  | Li Hua-Chung                                     | -do-                                           | Trans. Amer. Math. Soc.                         |
| 52  | Hydrometers in Soil Analysis                                                                                                         | Chen                                             | —                                              | —                                               |
| 53  | Determination of g by a rotating liquid                                                                                              | Kao Chih-En                                      | Fukien United Univ.                            | Phil. Mag.                                      |
| 54  | Origin of Charge produced by spraying liquids with jets of air                                                                       | Kao Chih-En                                      | -do-                                           | -do-                                            |
| 55  | The Orientation of Etching Figures in Quartz                                                                                         | Chung Hsin-Piao                                  | Peiping Acad. Physics Inst.                    | Nature                                          |
| 56  | Influence of Ultra-Violet Radiations on Etching Figures in Quartz                                                                    | Chung Hsin-Piao                                  | -do-                                           | -do-                                            |
| 57  | Coloration and Luminescence produced by Radium Rays in different varieties of quartz, and some Optical Properties of these Varieties | Chung Hsin-Piao                                  | -do-                                           | Proc. Physical Soc. London                      |

| No. | Title                                                                                                                | Author                              | Origin                                      | Western Journal                   |
|-----|----------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------|-----------------------------------|
| 58  | New Etching Patterns of Quartz and their Use for the Determination of Electric Axes and Detection of Crystal Defects | Chung Hsin-Piao                     | -do-                                        | -do-                              |
| 59  | The Specialisation of <i>Bremia lactucae</i> on Compositae                                                           | Ling Li                             | Szech. Prov. Ag. Exp. Sta.                  | Ann. Bot.                         |
| 60  | Contributions to our knowledge of the Ustilaginales in China                                                         | Ling Li                             | -do-                                        | Trans. Brit. Mycol. Inst.         |
| 61  | Effects of Magnesium Chloride and Manganous Nitrate on the Vitamin C content of Soyabeans                            | Shen Tung, K. M. Hsieh & T. M. Chen | SW Assoc. Univ. Biochem. Lab.               | Biochem. Journ.                   |
| 62  | Enumeration of the Begonias of SW China                                                                              | Yu Teh-Tsun                         | Yunnan Bot. Inst.                           | Journ. Linnean Soc.               |
| 63  | Notes on Chinese <i>Acer</i>                                                                                         | Hu Hsien-Hsiao & Cheng Wan-Chun     | -do-                                        | Notes Royal Bot. Garden Edinburgh |
| 64  | Absorption Spectrum of Methyl Glyoxal                                                                                | Wu Hsueh-Chou & Chang Pang          | Acad. Sinica Chem. Inst.                    | Trans. Faraday Soc.               |
| 65  | Quantitative Determination of Methyl Glyoxal and the Mechanism of its Reaction with Hypoiodite                       | Wu Hsueh-Chou & Chang Peng          | -do-                                        | Journ. Chem. Soc.                 |
| 66  | A First Study of Blood Groups among the Inhabitants of Western Yunnan                                                | Hsiao Chih-De                       | Huachung Univ.                              | Journ. Royal Anthropol. Inst.     |
| 67  | Quantum Electrodynamics                                                                                              | Chang Tsung-Sui                     | Nat. Central Univ.                          | Proc. Roy. Soc.                   |
| 68  | Fluorescein-Induced Parthenocarp                                                                                     | Liu Chiu-Hsiu & Lou Cheng-Hou       | Chinghua Univ. Gen. Physiol. Research Inst. | Nature                            |
| 69  | On the Hardy-Littlewood Theorem                                                                                      | Lou                                 | Kweichow Univ.                              | ?                                 |
| 70  | Proposals for Post-War International Cultural Cooperation                                                            | Li Chen-Pin (Maj.-Gen.)             | Army Medical College                        | ?                                 |
| 71  | New Aspects of the Physical-Chemistry of Steel-Making Processes                                                      | Yeh Chu-Pei                         | NRC, Metallurgical Works                    | Journ. Iron & Steel Inst.         |
| 72  | Contribution to the History of the Invention and Use of Gunpowder in China                                           | Wang Ling                           | Acad. Sinica History Inst.                  | Isis                              |
| 73  | Abstracts of Physical Papers presented before the Annual Meeting of the Chinese Physical Society                     | Ting Su-Pao                         | Chkiang Univ.                               | -do-                              |
| 74  | Traditional Methods of Sugar Manufacture in China                                                                    | Huang Chen-Hsun                     | Sugar Refining Wks. Neichiang.              | Journ. Soc. Chem. Indust.         |
| 75  | On the Origin of the Acrosome and the Be-                                                                            | Chang Chun-Wu                       | Chkiang Univ.                               | Quart. Journ. Mic. Sci.           |

| No. | Title                                                                                                                                                | Author                                       | Origin                                           | Western Journal         |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------|-------------------------|
| 6   | behaviour of the Nebenkern in <i>Diestrammena</i> sp.                                                                                                | Tung Ti-Chou, Chang Chih-Yeh & Tung Feng-Yeh | All-China Inst. of Developm. Psychol. & Physiol. | Proc. Zool. Soc.        |
| 7   | Experiments on the Developmental Potencies of Blastoderm Fragments of Teleostean Eggs                                                                | Hsu Hsueh-Chang & Shih-Chang                 | Chkiang Univ.                                    | -do-                    |
| 8   | Chromatophore Activity in Relation to Temperature and Eye-stalk-Extract Concentration                                                                | Bei Shih-Chang & Chu Rjen                    | -do-                                             | Nature                  |
| 9   | Some Experiments on the Salivary Gland Chromosomes of <i>Chironomus</i>                                                                              | Bei Shih-Chang & Chu Rjen                    | -do-                                             | Amer. Nat.              |
| 10  | A note on Lateral Piece Regeneration in <i>Planaria</i>                                                                                              | Chu Rjen & Bei Shih-Chang                    | -do-                                             | Amer. Nat.              |
| 11  | The Vitamin P Content of vegetables as influenced by Chemical Treatment                                                                              | Lo Teng-Yi & Chen Shan-Ming                  | Chkiang Univ. Agric. Coll.                       | Food Research           |
| 12  | Studies on the Organizer Problem in <i>Pelmatohydra oligactis</i> , I, The Induction Potency of the Implants and the Nature of the Induced Hydranths | Yao Tsung                                    | Chkiang Univ.                                    | Journ. Exp. Biol.       |
| 13  | -do-, II, The Effect of Some Respiratory Inhibitors and of Oxygen Deficiency on the Induction Potency of the Hypostome                               | Yao Tsung                                    | -do-                                             | -do-                    |
| 14  | -do-, III, Bud Induction by Developing Hypostome                                                                                                     | Li Han-Pu & Yao Tsung                        | -do-                                             | -do-                    |
| 15  | A possible means for determining the Mass of the Neutrino and the Radioactivity of the Neutron                                                       | Wang Kan-Chang                               | -do-                                             | Nature                  |
| 16  | On the Relationship between Nuclear Force and Gravitational Force                                                                                    | Wang Kan-Chang & H. L. Tsao                  | -do-                                             | -do-                    |
| 17  | Theory of Finite Electromagnetic Fields and Nuclear Force                                                                                            | Cheng Kai-Chia                               | -do-                                             | ?                       |
| 18  | A Simple Calculation of the Perihelion of Mercury from the Principle of Equivalence                                                                  | Cheng Kai-Chia                               | -do-                                             | Nature                  |
| 19  | Note on the H <sub>2</sub> Summability of the Fourier Series                                                                                         | Wang Fu-Chun                                 | -do-                                             | Proc. London Math. Soc. |

| No. | Title                                                                                                                 | Author                             | Origin                            | Western Journal     |
|-----|-----------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------|---------------------|
| 89  | Calculation of the Binding Energy of the Deuteron and the Neutron-Proton Scattering Power by a New Potential          | Wang Mu-Hsien                      | -do-                              | Physical Reviews    |
| 90  | A Genealogical Analysis of Fission in <i>Stylaria fossularis</i>                                                      | Chu Rjen                           | -do-                              | Proc. Zool. Soc.    |
| 91  | A Sky Phenomenon in Yunnan                                                                                            | Hsiao Chih-De                      | Huachung Univ.                    | ?                   |
| 92  | Metabolism of Steroid Hormones                                                                                        | Liu Yu-Min                         | Shanghai Med. Coll.               | ?                   |
| 93  | Molar Polarisation and Radius-Ratio of Ions                                                                           | Li Fang-Hsun                       | Nanking Univ.                     | Nature              |
| 94  | The Genus <i>Sarcophaga</i> in Szechuan                                                                               | Thomas, Huxley, T.                 | Shanghai Med. Coll.               | ?                   |
| 95  | Metallic Muscidac from China                                                                                          | Thomas, Huxley, T.                 | -do-                              | ?                   |
| 96  | Cytological Studies on Acrididae, IV, The Structure of the X-Chromosome in the Meiosis of <i>Phlaeoba infumata</i>    | Shih Li-Chieh                      | Chekiang Univ.                    | ?                   |
| 97  | Functional Relationship between the Uterus and the Corpus Luteum                                                      | Chu Rjen-Bao, C. C. Li, & S. S. Yu | Nat. Central Univ. Med. Coll.     | Journ. Endocrinol.  |
| 98  | New Peronosporaceae from China                                                                                        | Ling Li                            | Szech. Prov. Ag. Exp. Sta.        | Mycologia           |
| 99  | Note on the Estimation of the Amount of Inbreeding from Random Samples of a Natural Population                        | Li Ching-Chun                      | Nanking Univ.                     | Journ. Genetics     |
| 100 | Stress Analysis by the Coefficient Method                                                                             | Wang Shih-Hsi                      | SW Assoc. Univ. Engineering Coll. | ?                   |
| 101 | The Development of the Olfactory Organ of <i>Kaloula borealis</i> as compared with that of <i>Rana nigromaculata</i>  | Tsui Chi-Lan & Pan Ching-Hua       | Yunnan Univ. Biol. Dept.          | Quart. J. Mic. Sci. |
| 102 | The Effect of the Removal of the Lateral Appendix in the Embryonic Olfactory Organ of <i>Kaloula borealis</i>         | Tsui Chi-Lan                       | -do-                              | -do-                |
| 103 | A Preliminary Clinical Report on the Chinese drug "chang shan" in the treatment of Malaria                            | Cheng Fang-Tsu                     | Tatukou Iron Works Hospital       | ?                   |
| 104 | The Disease caused by <i>Trichostrongylus</i> and the species diversity of the parasite in the Lower Fouchiang Valley | Hung Shih-Lu & Li Fei-Pai          | Chiangsus Prov. Med. Coll.        | ?                   |

| Title                                                                                                                                           | Author                                                  | Origin                                      | Western Journal                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------|------------------------------------------|
| Harmonics in the Piezo-Electric Oscillation of a Quartz Plate                                                                                   | Chien Ling-Chao & H. C. Chu                             | Peiping Acad. Physics Inst.                 | Nature                                   |
| Fourier Analysis and New Syntheses of X-Ray Data for Crystal Structure, I. The Point Diagram Method, II. The Standard Function Method           | Yu Rjui-Huang                                           | Chinghua Univ. Metals Res. Inst.            | Proc. Roy. Soc.                          |
| The Presence of an Antibiotic Substance in the Chinese Water Chestnut, <i>Eleocharis tuberosa</i>                                               | Chen Shao-Lin, B. L. Cheng, W. K. Cheng & Tang Pei-Sung | Chinghua Univ. General Physiol. Res. Inst.  | Nature                                   |
| A new Method of Preparing Paraffin Models of Helminths for Demonstration                                                                        | Hung Shih-Lu & Yang Fu-Hsi                              | Chiangsus Prov. Med. Coll.                  | Museums Journ.                           |
| Generalised Star and Mesh Transformations                                                                                                       | D. W. C. Shen                                           | Marconi, China                              | Phil. Mag.                               |
| The Malaria Parasites in China                                                                                                                  | Hung Shih-Lu                                            | Chiangsus Prov. Med. Coll.                  | Proc. Roy. Soc. Trop. Med. & Hyg. Nature |
| A Medium for Mounting Helminth Parasites                                                                                                        | Li Fei-Pai & Yang Fu-Hsi                                | -do-                                        | Proc. Roy. Soc. Trop. Med. & Hyg.        |
| Occurrence of Canine Visceral Leishmaniasis in Villages West of Lanchow, Kansu                                                                  | Ho Kuan-Ching                                           | Nat. Epidem. Prev. Bureau                   | Proc. Roy. Soc. Trop. Med. & Hyg.        |
| Studies on the Antibacterial Substances in the Sap of <i>Allium sativum</i>                                                                     | Shen Chih-I                                             | Nat. Central Univ.                          | Nature                                   |
| Canonical Factorisation of Pseudo-Unitary Matrices                                                                                              | Li Hua-Chung                                            | Wuhan Univ.                                 | Quart. Journ. Maths.                     |
| On a Factorisation of Pseudo-orthogonal Matrices                                                                                                | Hsu Bao-Lu                                              | Acad. Sinica Maths. Inst.                   | -do-                                     |
| Report on an Adult Tapeworm found in Pigs in the vicinity of Wukung, Shensi                                                                     | Li Fu-Ching & An Keng-Chiu                              | Army Medical Coll. Sian                     | Proc. Roy. Soc. Trop. Med. & Hyg.        |
| The relation of a Nematode, <i>Trilenebus tritici</i> , to the development of the bacterial disease of Wheat caused by <i>Bacterium tritici</i> | Chou Chia Chih                                          | Chinghua Univ. Plant Pathol. Research Inst. | Annals of Appl. Biol.                    |
| A Note on the Hamiltonian Equation of Motion                                                                                                    | Chang Tsung-Sui                                         | Nat. Central Univ.                          | Proc. Camb. Philos. Soc.                 |
| Limnological Study of Erh-Hai Lake, Yunnan, I, Physico-Chemical Characteristics                                                                 | Hsiao Chih-De                                           | Huachung Univ.                              | Journ. Anim. Ecol.                       |
| Studies on the Variation of Polyhusks in Cultivated Rice ( <i>Oryza sativa</i> )                                                                | H. H. Kuang, Y. H. Chang & D. S. Tu                     | Szech. Prov. Ag. Exp. Sta.                  | Annals of Appl. Biol.                    |

| No. | Title                                                                                                                                   | Author                              | Origin                         | Western Journal              | Title                                                        | Author       | Origin                                                 | Western Journal         |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------|------------------------------|--------------------------------------------------------------|--------------|--------------------------------------------------------|-------------------------|
| 122 | Linkage Studies of Awn in Cultivated Rice                                                                                               | -do-                                | -do-                           |                              | Notes on Naiadomorph Oligochaeta of Philadelphia             | Chen Yi      | Nat. Central Univ.                                     |                         |
| 123 | The Gametokinetic Action of Androgen in Hypophysectomised Pigeons                                                                       | Chu Rjen-Bao & S. S. Yu             | Nat. Central Univ. Med. Coll.  | Journ. of Endocrinol.        | A Bent Pebble                                                | Li Sse-Kuang | Acad. Sinica Geol. Inst. Chinghua Univ. Plant Pathol.  | Nature Ann. Appl. Biol. |
| 124 | The Effect of the Removal of the Anterior Lower Sac on the Lateral Appendix in the Embryonic Olfactory Organ of <i>Kaloula borealis</i> | Tsui Chi-Lan                        | Yunnan Univ.                   | Quart. Journ. Mic. Sci.      | A New Mosaic Disease of the Cowpea ( <i>Vigna sinensis</i> ) | YuTa-Fu      | Chinghua Univ. Res. Inst. Army Medical College, Anshun | Ann. Appl. Biol. ?      |
| 125 | The Evolution of Insect Larvae                                                                                                          | Chen Shih-Hsiang                    | Acad. Sinica Zool. Inst.       | ?                            |                                                              |              |                                                        |                         |
| 126 | Phylogenetic Notes on the Wings of Insects                                                                                              | Chen Shih-Hsiang                    | -do-                           | ?                            |                                                              |              |                                                        |                         |
| 127 | The Universal Integral Invariants of Hamiltonian Systems and an Application to the Theory of Canonical Transformations                  | Li Hua-Chung                        | Wuhan Univ.                    | Proc. Roy. Soc. of Edinburgh |                                                              |              |                                                        |                         |
| 128 | Cotton Insect Problems of China                                                                                                         | Wu Ta-Chang                         | NW Agric. Coll. Chekiang Univ. | ?                            |                                                              |              |                                                        |                         |
| 129 | Studies on Organiser Problems in <i>Pelmatohydra oligactis</i> IV, Hypostome and Tentacle Differentiation                               | Yao Tsung & H. Mo                   |                                | Journ. Exp. Biol.            |                                                              |              |                                                        |                         |
| 130 | A Note on the Reaction of Nucleic Acid to Aceto-Carmine                                                                                 | Chu Rjen                            | -do-                           | Nature                       |                                                              |              |                                                        |                         |
| 131 | Further Experiments on the Relation between Natural Fission and Regeneration in <i>Stylaria fossularis</i>                              | Chu Rjen                            | Chekiang Univ.                 | Proc. Zool. Soc.             |                                                              |              |                                                        |                         |
| 132 | The Influence of the Thyroid Gland on Erythrocyte Fragility in the Rabbit                                                               | S. S. Yu, D. R. Kung & Chu Rjen-Bao | Nat. Central Univ. Med. Coll.  | Journ. Physiol.              |                                                              |              |                                                        |                         |
| 133 | A Histo-pathological Study of Small Lung-worm Infection in Sheep and Goats with Special Reference to Pulmonary Muscular Hypertrophy     | Li Pei-Ling                         | NW Med. Coll.                  | Journ. Path. & Bact.         |                                                              |              |                                                        |                         |
| 134 | The Relations between Heteropycnosis, Spiralisation and Lampbrush Formation of the Chromosomes in the Spermatogenesis of Acrididae      | Hsu Tao-Chao                        | Chekiang Univ.                 | ?                            |                                                              |              |                                                        |                         |
| 135 | The Interference Pattern of the Neighbouring Radiations in the Hilger Prism Interferometer                                              | Chien Ling-Chao                     | Peiping Acad. Physics Inst.    | Proc. Roy. Soc.              |                                                              |              |                                                        |                         |

## LIST VII

Chinese Scientific and Learned Journals  
transmitted in actual copies to the West.

Acta Brevia Sinensia (newsletter of the Chinese Nat. Sci. Soc.)  
Agricultural Extension Correspondent  
Agricultural News  
Agricultural Voice  
Amoy University Journal  
Annual Reports of the Fukien Provincial Geological Survey  
Annual Reports of the Kuangsi Provincial Agricultural Exp. Station  
Biochemistry Bulletin  
Biological Bulletin of Fukien United University  
Boletino de Ciencia  
Bulletin of Chinese Studies of Nanking University  
Bulletin of the Geological Society of China  
Bulletin of the National Industrial Research Bureau  
Bulletin of the Yunnan Botanical Institute  
Chemistry (a popular publication of the Chinese Chemical Soc.)  
China Science Service (microfilm extension work of International Cultural Service of China)  
Chinese Industry (publication of CIC)  
Chinese Journal of Educational Psychology  
Chinese Journal of Folklore  
Chinese Journal of Physics  
Chinese Journal of Scientific Agriculture (pub. NLP)  
Chinese Medical Abstracts  
Chinese Medical Digest (pub. Nat. Health Administration)  
Chinese Medical Journal  
Chungshan University Journal  
Chungshan University Literary and Historical Research Journal  
Climatological Data  
Contributions to Economic Geology  
Correspondence of the Agricultural Association of China  
Democracy and Science  
Entomologia Shaowuiana  
Film and Radio  
Forest Products  
Forestry Correspondent  
Fukien Agricultural Journal  
Fukien Literary Monthly  
Fukien Monthly Meteorological Bulletin  
Fukien United University Education Journal  
Fukien United University Journal of Arts  
Fukien United University Journal of Literature  
Futan University Journal  
Geological Bulletin (Bull. of the Geological Survey of China)  
Geological Memoirs (Mem. of the Geological Survey of China)  
Geological Reports of the Fukien Provincial Geological Survey  
Geophysical Memoirs  
Geophysical Reports of the National Academy of Peiping  
History and Geography Record  
Horticulture (pub. NW Agricultural College)  
Huanghai (Bulletin of the Huanghai Industrial Research Institute)  
Hunan University Journal  
Icones Plantarum Omeiensium

Industrial Cooperation (pub. CIC)  
Industrial Chemistry (microfilm extension work of several firms)  
Journal of the History Research Institute of Academia Sinica  
Journal of the Agricultural Association of China  
Journal of Agricultural Economics  
Journal of the All-China Sericultural Research Institute  
Journal of Animal Husbandry and Veterinary Science  
Journal of the Chinese Chemical Society  
Journal of the Chinese Pharmaceutical Society  
Journal of the Forestry Association of China  
Journal of the Institute for the History of Chinese Architecture  
Journal of the West China Border Research Society  
Kuangsi Agriculture  
Kweichow Industrial Quarterly  
Memoirs of the Meteorological Research Institute of Academia Sinica  
Memoirs of the Fukien Provincial Geological Survey  
Meteorological Magazine  
Monographs of the Chinese Studies Research Institute of West China Union University  
New Agriculture and Forestry  
New Agricultural Journal  
New World Monthly (industrial and economic)  
Northeastern University Journal  
Northwestern Animal Husbandry  
Nutrition Bulletin (Szechuan University)  
Observer (liberal weekly)  
Oceanographic Review  
Palaeontologica Sinica  
Pharmaceutical Quarterly  
Proceedings of the Chinese Physiological Society  
Proceedings of the Natural History Society of Fukien United University  
Quarterly Bulletin of Chinese Bibliography  
Research on Reconstruction (Kuangsi Provincial Bur. of Recon.)  
Science  
Science Abstracts and Articles selected from Microfilm (microfilm extension work of the Natural Science Society of China)  
Science News  
Science Reports of Chinghua University  
Scientific World (popular magazine pub. by Nat. Sci. Soc. China)  
Sinensia (Journ. of Academia Sinica Institute of Zoology)  
Soil Bulletin of the Geological Survey of China  
Soil Publications (Special) of the Geological Survey of China  
Soil Reports of the Fukien Provincial Geological Survey  
Soil Survey Office Publications, Chungshan University  
Southwestern Industrial Correspondent  
Special Bulletin of the Forest Products Research Station  
Studia Serica  
Technical Bulletin of the Forest Products Research Station  
Thought and Learning (pub. by a group of Chengtu professors)  
Thoughts and the Times (also Chengtu)  
Universe  
Voice of Formosa  
Weather (pub. Fukien Provincial Meteorological Survey)  
West China Medical Correspondent  
Youth and Science

## L I S T VIII

Names of Scientific Personnel proceeding to the  
West for periods of Research or Advanced Study

### British Council Visiting Professors

1944-5 Dr. Yin Hung-Chang  
Dr. Chang Tzu-Kung  
1945-6 Dr. Chang Tsung-Sui  
Dr. Ling Li  
Dr. Li Shan-Bang

recommended

for

1946-7 Dr. Hua Lo-Keng  
Dr. Li Hua-Tsung  
Dr. Lou Cheng-Hou

### British Council Visiting Fellows

1944-5 Mr. Huang Li-Sung  
Mr. Huang Hsing-Tsung  
Dr. Wang Sao-Han

recommended

for

1946-7 Mr. Chen Yuch-Tseng  
Mr. Cheng Kai-Djia  
Miss Chiu Chiung-Yun  
Dr. Shen Ting-Hung  
Mr. Yao Tsung  
Mr. Chung Hsiang-Chung  
Mr. Liu Yu-Min  
Mr. Huang Cheng-Chung  
Mr. Chang Su-Cheng  
Mr. Fan Kuo-Seng  
Mr. Huxley T. Thomas  
Mr. Tsao Tien-Chin  
Mr. Wang Ling

### British Council Visiting Students (chosen by the Ministry of Education)

1944-5 Mr. Shen Yuan  
Mr. Tsao Peng-Hai  
Mr. Lu Ti-Li  
Mr. Chen Rjui-Chuan  
Mr. Yuan Sui-Shan  
Mrs. Y. Y. Yuan  
Mr. Meng Ching-Yuen  
Mr. Ling Wei-Tze  
Mr. Fang Pin

Dr. Chou Hou-Fou  
1945-6 Mr. Chang Shih-Ying  
Mr. Tung Shao-Yung  
Mr. Lin Tung-Chi  
Mr. Sung E-Chang  
Mr. Wu Li-I  
Mr. Feng Hsiao-So  
Mr. Chi Tsin-Tsen  
Mr. Sung Ching-Ying  
Mr. Tzu Hung-Yuan

Biochemistry  
History of Science  
Mathematical Physics  
Plant Pathology  
Geodesy

Mathematics  
Mathematics  
Plant Physiology

Organic Chemistry  
Organic Chemistry  
Medicine

Protozoology  
Mathematical Physics  
Biochemistry  
Immunology  
Experimental Morphology  
Refractories Technology  
Biochemistry  
Mathematics  
Mathematics  
Public Health  
Entomology  
Organic Chemistry  
History of Science

Ministry of Education)  
Aeronautics  
Chemistry

-do-

-do-

Civil Engineering  
Naval Architecture  
Electrical Engineering  
Mechanical Engineering  
Metallurgy  
Chemical Engineering  
Aeronautical Engineering

-do-

-do-

-do-

-do-

-do-

Mechanical Engineering

-do-

-do-

Mr. Wan Chia-Huang  
Mr. Tsui Chi-Ya  
Mr. Fang Ching-Chih  
Mr. Liao Chung-Chong  
Mr. Liu Ching-Weng  
Mr. Hu Chao-Yang  
Mr. Sung Li-Chung  
Mr. Shen Tzu-En  
Mr. Hsiao Tien-To  
Mr. Shen Yao-Gei  
Mr. Liu Kung-Bi  
Mr. Hsu Li-Chung  
Mr. Chang Fan  
Mr. Chu Chih-Yung  
Mr. Sun Teh-Tsu  
Mr. Yen Ke-Hsin  
Mr. Chang Pang  
Mr. Hu Ping-Fang  
Mr. Hung Hsi-Min  
Mr. Hu Sze-Tsen  
Mr. Wang Hsien-Chung  
Mr. Hu Hsi-Ming  
Mr. Yang Chung-Chong  
Mr. Chuang Shou-Hua  
Mr. Kung Cheng-Chang  
Mr. Hsu Erh-Hao  
Mr. Wu Chuen-Chun  
Mr. Wang Hung-Cheng  
Mr. Cheng Chen  
Mr. Tien Yu-Kang  
Mr. Cheng Kuo-Chiu  
Mr. Shen Chia-Hsiang  
Mr. Szeto Shu-Chi  
Mr. Lou Tze-Ching  
Mr. Tu Kuo-Se  
Mr. Hsu Yu-Chung  
Mr. Yu Nan-Keng  
Mr. Pan Shao-Chou  
Mr. Liao Sung-Rjui  
Mr. Chou Ting-Chung  
Mr. Yang Wen-Min  
Mr. Sun Chuan-Hsing  
Mr. Pi Rjui-Kang  
Mr. Chu Hsi-Tao  
Mr. Bao Lu-Ping  
Mr. Liu Yu-Cheng  
Mr. Liang Se-Chen  
Mr. Wu Shih-Hsiao

### Assistance in various forms to the following:—

Dr. Chang Chih-Wen  
Dr. Chang Wen-Yu  
Dr. Cheng Tsung-Hai  
Dr. Chien Chia-Chi  
Dr. Cheng Tso-Hsin  
Dr. Chu Rjui-Hua  
Dr. Feng Teh-Pei  
Dr. Li Yi (Canada)  
Dr. Liu Chun-Ou (India)  
Dr. Peng Shu-Ling  
Dr. Wang Ching-Hsi  
Dr. Yu Hung-Cheng  
Dr. Yu Tzu-Chun

Mechanical Engineering

-do-

-do-

Civil Engineering

-do-

-do-

Electrical Engineering

-do-

Hydraulic Engineering

Marine Engineering

Mining

Metallurgy

Textile Engineering

-do-

Railway Engineering

Chemistry

-do-

-do-

-do-

Mathematics

-do-

Physics

-do-

Biology

-do-

Geography

-do-

Geology

-do-

Psychology

Pharmacology

-do-

-do-

-do-

-do-

-do-

Medicine

-do-

-do-

-do-

Surgery

-do-

Public Health

Dentistry

Agriculture

-do-

Forestry

Animal Husbandry

Agriculture

Geology

Science Education

Physics

Zoology

Organic Chemistry

Physiology

Pathology

Entomology

Chemistry

Psychology

Physical Chemistry

Pediatrics