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SCIENTIFIC INFORMATION REPORTChinese Science (19)

This is a serialized report consisting of unevaluated information prepared as abstracts, summaries, and translations from recent publications of the Sino-Soviet Bloc countries. It is issued in seven series. Of these, four, Biology and Medicine, Electronics and Engineering, Chemistry and Metallurgy, and Physics and Mathematics, are issued monthly. The fifth series, Chinese Science, is issued twice monthly; the sixth series, Organization and Administration of Soviet Science, is issued every 6 weeks; and the seventh, Scientific and Technical Information on Outer Mongolia, is issued sporadically. Individual items are unclassified unless otherwise indicated.

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## ERRATUM

In Summary No 4144, Scientific Information Report, Chinese Science, (16), pages 53-55 should have appeared following page 47.

## AGRICULTURAL SCIENCES

SOUTH CHINA COLLEGE OF AGRICULTURE SUCCEEDS IN CONTROLLING INSECTS --  
Canton, Chung-kuo Hsin-wen, 9 Dec 62, pp 5-6

South China College of Agriculture disease and insect damage specialists, Chao Shan-huan (6392/0810/2970), Fan Huai-chung (5400/2037/1813), Li Yu-kan (7812/3022/1626), Lin K'ung-hsiang (2651/1313/3276), and others have in the past few years done research on grain, fruit, and vegetable insect damage and disease damage and have made a summation of peasant experience in getting rid of insects. They have found some effective measures to get rid of insects and prevent disease.

Chao Shan-huan, Vice-president of the college has over the past 10 years or more been carrying out systematic research on the great enemy of South China's beautiful lichee nut -- Pentatomidae. He thoroughly understands its living habits and environmental growth and has already found reliable methods of controlling this insect.

The important enemies of paddy rice are the *Schoenobius incertellus* walker and the marching caterpillar (nien-ch'ung: 4724/5722). Professor Chao began research on the control of *incertellus* Walker in 1935 and, on a large scale, since 1950. He and other teachers have made a summation of peasant experience and have compiled a complete set of cultivation techniques to guard against insect damage, they have also discovered a chemical agent which kills the *incertellus* Walker. In the past 2 years, the peasants of the Ch'ao-shan area and San-chiao Chou on the Pearl River have used these measures with marked success. The marching caterpillar appears at night on mature paddy rice and bites off ears of grain. It eats paddy rice leaves and damages winter wheat. In the last few years, college teachers have gone to the villages to make investigations and conduct research. They have made preliminary conclusions about the insect's living habits and the laws which govern its occurrence and have discovered a dependable insecticide. The peasants of Chan-chiang and other areas, by applying the results of this research, are able to control the emergency of this insect in its early stages and thus reduce damage.

College specialists have been conducting research on a large scale on paddy rice stripe and dry stripe and dry leaf disease, vegetable mosaic, vegetable soft rot, vegetable root rot, melon downy mildew, and the orange-yellow dragon [plant] disease. They have found the causes of these diseases and the rules governing their occurrence and have come up with a whole set of control procedures.

RESEARCH STRESSED AT PEIPING AGRICULTURAL UNIVERSITY -- Peiping, Jenmin Jih-pao, 27 Dec 62, p 2

Instructors at Peiping Agricultural University are presently engaged in over 100 research projects. The percentage of time spent by instructors on research has increased this year from 10 to 30 for the majority of instructors. Research projects are currently underway in the fields of crop breeding, pest and disease prevention, and land reclamation. The latter topic is being stressed by the departments of agronomy and agrochemistry. Among the topics studied in the field of pest and disease control are studies of the rice borer, Teronosporaceae, cabbage diseases, and the corn borer. Several new types of rust-causing organisms have been identified; a new variety of wheat tolerant to rust has been developed.

Prof. Ts'ai Hsu (5591/2485) has been among the most active of the wheat specialists.

Hsin-Hsiang Institute of Agriculture Concerned About Seed Distribution -- Peiping, Kuang-ming Jih-pao, 21 Dec 62, p 2

Hsin-Hsiang Institute of Agriculture, Honan Province, normally is concerned about recommending its own selected crop seed to production units and the potentiality of the results of its own research when actually applied to production. Research personnel of this institute usually take advantage of the opportunity of calling agricultural model workers meetings to propagandize the superior features of new varieties of seed which they have selectively grown and of requesting that these seeds be test-planted and popularized. After a new variety of seed has been successfully developed, in addition to trial planting at their own experimental station, they take it to the research centers of certain production units with the hope that it will be adaptable to other areas. Since 1950, they have developed a number of new seeds including wheat, cotton, and millet. Of these, 22 have been popularized over a wide area. In the last 10 years or so, they have supplied over a 100,000 chin of various kinds of improved crop seeds throughout the special district and in neighboring villages.

CHINESE ACADEMY OF AGRICULTURAL SCIENCES CONTINUES RESEARCH -- Peiping, Jen-min Jih-pao, 29 Dec 62, p 2

The institutes of the Chinese Academy of Agricultural Sciences have been actively pursuing research in various fields. The Institute of Soils and Fertilizers has been studying the problem of soil salination. The Institute of Plant Protection has been studying the use of 666 insecticide in the control of the corn borer. The Institute of Crop Breeding and Cultivation has been studying problems connected with wheat production.

SOIL AND FERTILIZER INSTITUTES IN SHANSI AND CHEKIANG ENGAGED IN RESEARCH -- Peiping, Kuang-ming Jih-pao, 19 Dec 62, p 2

The Shansi Provincial Institute of Soils and Fertilizers has been studying the problem of soil salination and its treatment, as well as methods of improving the utilization of fertilizers, for the past few years. In their work on soil salination, this institute has worked closely with the Shansi Provincial Institute of Hydraulic Engineering.

For the past 2 years, the Institute of Soils and Fertilizers of the Chekiang Provincial Academy of Agricultural Sciences, has been conducting research on the improvement of this province's low-level lateritic soil as well as methods to increase its resistance to erosion and the fall drought.

HORTICULTURE RESEARCH CONDUCTED IN SHANGHAI -- Peiping, Kuang-ming Jih-pao, 23 Dec 62, p 2

The Institute of Horticulture, Shanghai Municipal Academy of Agricultural Sciences, has been working on the introduction of improved strains of local vegetables for the Shanghai area for several years. The academy has published a survey of the vegetables in the Shanghai area under the title Shang-hai Shu-ts'ai P'in-chung Chih (Records of Shanghai Vegetable Varieties).

INSECT PESTS STUDIED BY YUN-CH'ENG COTTON INSTITUTE -- Peiping, Kuang-ming Jih-pao, 18 Dec 62, p 2

The Yun-ch'eng Institute of Cotton, Shansi Provincial Academy of Agricultural Sciences has been studying the two insect pests *Lygus lucorum* Meyer-Dur and *Adelphocoris lineolatus* Goeze for sometime. These two insects are among the most dangerous to cotton and clover.

KWEICHOW INSTITUTE OF VETERINARY MEDICINE ACTIVE -- Peiping, Ta Kung Pao, 23 Dec 62, p 2

Since 1956, the Kweichow Provincial Institute of Veterinary Medicine has been dispatching technicians to the countryside to interview veterinarians about their methods of treatment and, in addition, has continued to publish works describing the techniques used by these veterinarians and other related works. For example, veterinarians Yang Shao-ch'in (2799/4801/2953), of T'ung-tze Hsien, and Chang Hsien-sang (1728/7359/5364), of Weng-an Hsien, have been consulted about their techniques in treating diseases of swine.

SHANSI AGRICULTURAL SCIENTISTS PROPOSE IMPROVEMENTS IN CULTIVATION ---  
Peiping, Jen-min Jih-pao, 6 Jan 63, p 2

Agricultural scientific workers in Shansi Province have proposed 12 solutions to important agricultural problems in the province on the basis of their own research. These solutions were proposed at the 1962 annual conference of the Shansi Provincial Agricultural Society, held recently in Tai-yuan.

There are a great many cultivated areas in the loess hills of northwest Shansi, but there is a shortage of labor, and the land has neither sufficient moisture nor fertility. The people in this area use the method of letting the land lie fallow on alternate years to improve its capabilities. On the basis of several years of investigations and study of the experience of the masses, several researchers from the Hsin Institute of Grains, Shansi Provincial Academy of Agricultural Science, suggested the rotation planting of grain crops and sweet clover instead of leaving the land fallow on alternate years.

In another case, personnel of the Ta-t'ung Institute of Grains carried on research for several years and discovered that selection of healthy plants and selection of young seed potatoes in the fields is a simple method of preventing degeneration of the potatoes. They tried this method in several districts in northern Shansi and found that it was effective in increasing production. At the conference, they suggested that base areas for the propagation of potatoes which would use this method be established at suitable areas in northern Shansi.

SHANTUNG SCIENTISTS AND TECHNICIANS VISIT VILLAGES TO PROMOTE WINTER PRODUCTION -- Peiping, Jen-min Jih-pao, 6 Jan 63, p 2

More than 30 agricultural and medical scientists and technicians in Shantung Province have been organized into a lecture group which is visiting several key hsien and cities to develop instruction in science and technology.

Since early November of 1962, the three teams of this lecture group have visited 26 hsien and cities, where they delivered instruction to lower and middle grade technicians and medical personnel, as well as the cadres of the rural communes. This instruction was presented in a variety of ways; by radio lectures, educational motion pictures, symposiums, inspection tours in the fields, etc. This lecture group was organized jointly by the Shantung Province Scientific and Technical Association, the Provincial Department of Agriculture, the Department of Public Health, the Weather Bureau, the Provincial Academy of Agricultural Science, the Agricultural Society, the Society of Medicine, Pharmacology, and Health, and the Society of Meteorology.

YOUNG INTELLECTUALS WORK FOR AGRICULTURAL MODERNIZATION -- Peking, Kuang-ming Jih-pao, 3 Jan-63, p 1

During 1962 and for several years past, tens of thousands of technicians who have undergone many years of academic training have found positions in the rural villages where they can contribute their own special skills and knowledge. These technicians have formed an important force for the advancement of modernization of Chinese agriculture. Each year for the past several years, upwards of 10,000 young people who have received some higher education or middle school technical education have voluntarily devoted themselves to construction in the rural villages. In 1962, the number of young intellectuals who have gone to the rural villages exceeds that of any previous year.

During 1962, many higher level agricultural schools and colleges celebrated the tenth anniversary of their founding. In honor of these occasions, headlines like the following appeared in many local newspapers: "Peking College of Agricultural Mechanization Places 2,000 Graduates in Productive Jobs Over the Past 10 Years", "(Sinkiang) Pa-i Agricultural College Trains 5,000 Graduates for Agricultural Work in the T'ien Shan Area Over the Past 10 Years", "Mukden Agricultural College Conscientiously Carries Out the Party's Educational Program and Trains 3,000 Agricultural Technicians Since its Founding 10 Years Ago", and "South China Agricultural College Holds Tenth Anniversary Commemorative Activities, Trains More Than 3,000 Specialists in 10 Years."

According to statistics, there have been five times as many agricultural college graduates from the time of the liberation through 1962 than in the 20 years prior to the liberation for which there are records. Each year, groups of agricultural graduates go to work at agricultural departments on various levels, schools, and scientific research organs, and a comparable number of graduates are placed in positions at state-operated farms, people's communes, and basic level technical units in rural villages. In the Peiping area alone, more than 900 agricultural college graduates are presently being placed in jobs in agricultural construction. Spring 1962, there were more students assigned to agricultural extension stations, animal husbandry and veterinary medicine stations, and seed stations in the suburban areas than in any previous year. As a result, the technical capabilities of these units was three times what it had been originally.

At present, graduates of the Pa-i Agricultural College are working in many of the rural villages and farms of the production and Construction Army Group in the Sinkiang Uighur Autonomous Region. Before the liberation, there was not a single specialist in veterinary medicine in the Altai Shan region, but in the past few years, more than 20 high level animal husbandry and veterinary medicine personnel have been sent to this area by the Pa-i Agricultural College.

During 1962, the several tens of farms established by the Ministry of State Farms and land reclamation in Sinkiang and Heilungkiang recruited more than 1,200 graduates of various agricultural colleges as technical cadre. Even so, the technical force at these farms is still considered insufficient. During 1963, the farms plan to recruit a great many more technical cadres than in 1962.

There are presently more than 2,000 graduates of higher level schools in ten-odd provinces and cities participating in construction work in the old revolutionary bases of northern Shensi. Most of them are specialists in agriculture and forestry, water conservation, teaching, or medicine. They were assigned to agricultural technology extension stations, water and soil conservation experimental stations, sand control work teams, and forestry experimental stations, as well as a few schools and hospitals. In Kwangtung Province, the South China Teacher's College, Chung-shan Medical College, and other schools have assigned 90 percent or more of their graduates to work in the rural villages over the past 2 years.

At present, in the rural villages, the middle level agricultural technicians represent the most widely distributed and most numerous technical force. During 1962, there were 2,000 middle level agricultural technicians graduated in Shensi Province. This brought the total number of middle level agricultural technicians in the rural villages of the province to more than 10,000. In the Ningsia Hui Autonomous Region, which has a population of 2 million, the Yung-ting Agricultural School has, since its establishment in 1951, trained more than 1,000 technicians to work in the Yellow River irrigation area and the rural villages of the Liu-p'an Shan area.

In the Mu-tan-chiang reclamation area of Heilungkiang Province, more than 900 college and vocational school graduates have cooperated closely with the workers for several years in carrying out a series of investigations and experiments.

AGRICULTURAL GRADUATES CONTINUE WORK IN PEIPING AREA -- Peiping, " Jen-min Jih-pao, 22 Dec 62 p 1

Over 900 graduates of higher agricultural and forestry schools are working in the Peiping area. Feng P'eng (7364/2590), a 1955 graduate of the Agronomy Department, Peiping Agricultural University, is working in Shuang-ch'iao State Farm, where he is encouraging the growth of improved strains of corn. Shih Ting-ch'ao (0670/1353/3390), a graduate of Nanking Agricultural College, where he specialized in the raising of vegetables indigenous to South China, has been working at a farm west of Peiping since 1954 in the field of horticulture. Wang Chung-ch'iu (3769/0112/4428), a graduate of Peiping Agricultural Mechanization College, is also working in the Peiping area.

Other recent graduates are now filling posts in the Peiping area as assistant directors of state farms, people's commune party secretaries, instructors in agrotechnology, agricultural technicians, production team leaders, and directors of veterinary hospitals.

KAN-NAN AGRICULTURAL CADRE SCHOOL GRADUATES 2,000 STUDENTS -- Peiping, Kuang-ming Jih-pao, 21 Dec 62, p 2

Kan-nan Agricultural Cadre School offers rotation training classes for cadres engaged in agriculture. The second group of students to graduate, a class of 2,000 spent 40 days studying. This group of students consisted of technical cadres from agricultural extension stations, seed stations, and animal husbandry and veterinary stations of various hsien and municipalities of Kan-nan, agrotechnicians from reclaimed areas, and assistant commune directors. The training program consists of three different specialized courses: agricultural techniques, animal husbandry and veterinary medicine, and a commune director course. The content of study is party program and policy, agricultural management and administration, and general agriculture. The substantive matter of the agricultural technology class primarily consists of crop cultivation and disease and insect damage control, but it also includes basic theory in plant physiology, soil, agricultural chemicals, and genetic seed selection.

VETERINARY GRADUATES WORK IN DWEICHOW -- Peiping, Kuang-ming Jih-pao, 5 Jan 63, p 2

Two members of the first graduating class of the Department of Animal Husbandry and Veterinary Medicine, Kweichow Agricultural College, Cheng Chun-hsien (6774/0193/0341) and Yang Shao-hsien (2799/1421/0341), are carrying out research along with their fellow graduates in various communes and research units in Kweichow Province.

AGROTECHNICAL SCHOOL IN LIAONING ACTIVE -- Peiping, Kuang-ming Jih-pao, .  
23 Dec 62, p 2

The Hsiung-ch'iu Agrotechnical School (Hsiung-ch'iu Nung-yeh Chuan-k'o Hsueh-hsiao; 3574/8003/6593/2814/1413/4430/1331/2699) in Liaoning Province, has graduated a large number of agricultural technicians over the past few years. These graduates are now at work in various provincial agro-technical extension stations, and municipal and hsien bureaus.

NANKING AGRICULTURAL COLLEGE GRADUATES CORRESPONDENCE STUDENTS -- Peiping, Kuang-ming Jih-pao, 19 Dec 62, p 2

Twenty-six correspondence students, presently employed in people's communes or agricultural research units, recently graduated from Nanking Agricultural College.

#### BIOLOGICAL AND MEDICAL SCIENCES

MILITARY HOSPITALS CONDUCT ANIMAL EXPERIMENTS -- Peiping, Kuang-ming Jih-pao, 22 Dec 62, p 2

Medical personnel at various military hospitals in Shanghai are carrying out animal experiments.

Prof Ch'en Yueh-han (7115/4766/5060), a stomatologist, has been studying the use of the Chinese drug, toad venom, in the treatment of tooth decay. In his experiments on monkeys, he has found that although toad venom is no more effective than arsenic compounds, it is safer.

Prof T'u K'ai-yuan (1458/7030/0336), an osteologist, has been studying the surgical technique of transplanting removed appendages.

Prof Kung Chien-chang (7895/1096/4545), director of a parasitology laboratory, has been studying the infestation of animals with "duck" blood fluke [ya hsueh-hsi-ch'ung; 7700/5877/0705/5722; an unidentified species of Schistosoma] and the Schistosomajaponicum. Professor Kung found that, after infestation with "duck" blood fluke, "rice paddy dermatitis" [tas-t'ien pi-yen; 4470/3944/4122/3508] developed, but it did not become schistosomiasis.

TRACHOMA AND AMAUROSIS DISCUSSED IN HUMAN -- Peiping, Kuang-ming Jih-pao,  
4 Jan 63, p 2

A conference was held recently in Cheng-chou by the Honan Provincial Ophthalmology Society; ophthalmologists from other provinces also participated. The conference discussed the treatment of amaurosis and trachoma.

In Honan, after the testing of over 200 types of drugs, several tens of types were found to inhibit trachoma; eight types were found that were fully effective. Cellular observations are being made in Peiping on the multiplication of the trachoma virus; inoculation experiments are being carried out in Shanghai. Some progress has been achieved by the Wuhan Medical College using simple introversion operating techniques. Clinical tests have been made by ophthalmologists in Hunan, Honan, and Chekiang provinces, where a combination of pharmaceutical and mechanical treatment is used. Cortisone has been used successfully in Honan and Kiangsi Provinces.

Research on amaurosis is still in its preliminary stage; no curative technique has proved effective, but successes have been recorded in the treatment of some symptoms.

TWO SURGICAL TECHNIQUES PROVE SUCCESSFUL -- Peiping, Kuang-ming Jih-pao,  
23 Dec 62, p 2

Recently, two tracheal operations were successfully carried out: in Shanghai, an enlarged lymph gland was removed; in Peiping, a foreign object was removed from deep within the trachea.

Ch'ien Yun-ch'ing (6929/0336/1987), assistant head of the Surgery Department, Shanghai Municipal People's Hospital No 6, removed an enlarged lymph gland that was causing a near-fatal obstruction of the trachea of a female infant.

In another operation, prominent throat specialist Hsu Yin-hsiang (1776/5593/4382), Otolaryngology Department, Peiping T'ung-jen Hospital, successfully removed a 2.2-centimeter-long toy glass bird from deep within the left branch of the trachea of a 10-year-old child. The operation was performed without opening the thoracic cavity by the use of a small hook while the patient was under heavy anesthesia.

DRUGS TO COMBAT LIVER DISEASES MARKETED -- Peiping, Ta Kung Pao,  
24 Dec 62, p 3

Two pharmaceutical plants in Canton have marketed drugs aimed at combating various diseases of the liver.

The Canton Public-Private Jointly-Operated Ch'iao-kuang Pharmaceutical Plant (Kuang-chou Kung-szu Ho-ying Ch'iao-kuang Chih-yao Ch'ang; 1684/1448/0361/4424/0678/3602/0294/0342/0455/5673/0617) is marketing a drug with the trade name "Sowlkon," (Shou-erh-k'ang; 1108/1422/1660) described as a royal jelly compound to be used in treating neurasthenia, infectious hepatitis, cirrosis of the liver, and rheumatic arthritis.

The same plant is marketing an injection under the trade name of "Feng-shih-ning" (7364/3440/1380), described as a bee venom compound used in the treatment of rheumatic arthritis and sciatica.

The Canton Public-Private Jointly-Operated Pao-tzu-t'ang Consolidated Pharmaceutical Plant (Kuang-chou Kung-szu Ho-ying Pao-tzu-t'ang Lien-ho Chih-yao Ch'ang (1684/1558/0361/4424/0678/3602/0202/3320/1016/ 5114/0678/3477/0073/0017) is marketing a drug under the trade name "Kan-huang-tan Wan" (5139/7806/4010/0029), a tablet used to treat hepatitis and jaundice.

TIENTSIN PHARMACEUTICAL PLANTS MARKET DRUGS -- Peiping, Ta Kung Pao,  
18 Dec 62 p 3

The pharmaceutical plants of the Tientsin Pharmaceutical Industry Company (T'ien-chin Shih Chih-yao Kung-yeh Kung-szu; 1131/3160/1579/0455/5673/1562/2814/0361/0674) are producing cortisone acetate, syntomycin, and an anticancer drug.

The cortisone acetate tablets are used in cases of rheumatoid arthritis, rheumatic fever, etc. An odorless syntomycin syrup is sold and recommended for typhus, bacillary intestinal and urethral infections, heteropneumonia, and whooping cough. Finally, an injection known as "Yen-ti" [4074/2420; literally, "Cancer Enemy] is being sold and recommended for the treatment of cancer of the cervix, uterus, breasts, lymph, [glands] stomach, lungs, and intestines.

The pharmaceutical plants of the Tientsin Pharmaceutical Industry Company are as follows: Yu-i Pharmaceutical Plant (Yu-i Chih-yao Ch'ang; 0045/6146/ 0455/5673/1681); Jen-min Pharmaceutical Plant (Jen-min Chih-yao Ch'ang; 0008/3046/0455/5673/1681), Hui-fu Pharmaceutical Plant (Hui-fu Chih-yao Ch'ang; 1920/4569/0455/5673/1681), T'ien-chin Pharmaceutical Plant (T'ien-chin Chih-yao Ch'ang; 1131/3160/0455/5673/1681), Ho-p'ing Pharmaceutical Plant (Ho-p'ing Chih-yao Ch'ang; 0735/1627/0455/5673/1681), and Hsin-hsin Pharmaceutical Plant (Hsin-hsin Chih-yao Ch'ang 2450/2450/0455/5673/1681).

TUBERCULOSIS DRUG MARKETED IN CANTON -- Peiping, Kung-jen Jih-pao,  
5 Jan 63, p 4

The Nan-yang Pharmaceutical Plant (Nan-yang Chih-yao Ch'ang; 0589/3152/0455/5673/0617) in Canton is marketing "T'ieh P'o-t'ang" (6993/4275/3282) syrup for the treatment of infiltrative tuberculosis.

PROMINENT DOCTORS GATHER IN PEIPING -- Peiping, Kuang-ming Jih-pao,  
28 Dec 62, p 1

Over 110 prominent practitioners of traditional and western medicine gathered on 28 December 1962 in Peiping at a soiree to welcome the new year. Those in attendance included P'u Fu-ch'ang (1346/1599/1587), 80-year-old Vice-President of Shanghai First Medical College; Lin Ch'iao-chih (2651/1564/4460), an obstetrician; Huang Chia-szu (7806/1367/7475), a specialist in thoracic surgery; Chung Hui-lan (6945/1920/3482), a specialist in tropical diseases; Chang Hsiao-ch'ien (1728/1321/7505), a specialist in internal medicine; and Hou Pao-chang (0186/1405/3864), a physiologist recently returned from abroad. Prominent practitioners of traditional medicine present included P'u Fu-chou (5543/6534/0719) and T'ang Liang-ch'ien (0781/0081/5256).

Others attending this party, held by the Chinese Medical Association, included 60-year-old M ng Chi-mao (1322/4949/2021) and Liang Kuo-hsing (2733/0948/5281) a doctor at Fu-wai Hospital.

KIANGSI DOCTORS EXCHANGE EXPERIENCES -- Peiping, Kuang-ming Jih-pao,  
19 Dec 62, p 2

Ch'eng Ch'ung-ch'i (4453/1504/3769), Hu Yu-shang (5170/3731/1424), Wu Tao-chun (0702/6670/6874), and Sun P'eng (1327/2590), all of whom are professors at Kiangsi Medical College, along with a number of instructors at that college, have recently toured various parts of Kiangsi Province to talk with local doctors and members of medical units. This program was organized under the auspices of the Kiangsi Medical Society and the Kiangsi Provincial Society of Pharmacy and Public Health.

HUAI-TE HSIEN HOSPITAL AIDS COMMUNES TO TRAIN MEDICAL PERSONNEL -- Peiping,  
Kuang-ming Jih-pao, 21 Dec 62, p 2

Huai-Te Hsien Hospital, Kirin Province, has begun classes in Chinese medicine, pharmacy, and nursing to assist rural commune health units and production team dispensaries to train a group of young medical personnel. Young practitioners of Chinese traditional medicine from the villages who have enrolled in the courses not only review Chinese traditional

medicine and the basic theories of socialist medical studies such as Chinese native medicine but also study basic western surgery. This hospital has sent medical personnel to commune health units for a specific period to assist with medical treatment work and has organized conferences to exchange experience in diagnosing and treating diseases that usually develop in the villages, which has helped health unit personnel to raise their standards.

NORTHWEST PLATEAU BIOLOGY INSTITUTE STUDIES FISH -- Peiping, Kuang-ming Jih-pao, 21 Dec 62, p 2

Scientific and technical personnel of the Northwest Institute of Plateau Biology of the Chinese Academy of Sciences and aquatic product departments are currently engaged in studying the laws governing the growth and development of the star fish [Note: Although this is the term used for the common Marine star fish it evidently refers to something entirely different here] in Tsinghai Lake. As of May this year, they have been setting up fixed and mobile work stations at such places as the fishing bases near Pao-t'ang Ho, the mouth of the Pu-ha Ho in the northern area; T'ieh-t'u-ch'ia on the south shore, and Hai-hsin Shan, a lake island. Thus far they have dissected more than 3,000 star fish and have collected a great number of male and female germ cell specimens, as well as a large quantity of data on the sex ratio, fertile egg count, life span, food specialization, embryonic development, and population composition of the star fish. After observing the reproductive habits and determining the various ages of the star fish, researchers did preliminary research on the breeding season, spawning grounds, and growth rate, which proved that the star fish is a strong reproducer and early maturing species of fish and a member of the carp family. Scientific workers have also done research on a parasitic disease which affects the star fish.

ORNITHOLOGIST REPORTS ON BIRD SIGHTED FOR FIRST TIME IN CHINA -- Canton, Chung-kuo Hsin-wen, 26 Dec 62, p 8-9

Prof Chou Yu-yuan (0719/1342/0997) said in an interview recently that he had once participated in the work of the Zoological Section of the South China Tropical Zoological Comprehensive Investigation Team of the Chinese Academy of Sciences. In investigating the zoological resources and Fauna of Kwangtung, Kwangsi, and Fukien provinces, he obtained valuable reference material. On one occasion this section discovered a flock of birds of unusual color. Further investigation proved that this was the golden-crested mynah, seen for the first time in China. In the past, this bird was known to have been limited to Assam in India, Burma, Thailand, Iran, and the northern part of the Malay Peninsula. Since the bird was first discovered and named 120 years ago, the discovery of it in Chieh-yang Hsien, Swatow Special District, is of great scientific interest.

The professor continued that he is currently engaged in a summation of his scientific research over the past several years and is submitting inquiries and opinions concerning the development and utilization of the abundant bird resources in the provinces. Not long ago, he attended the All-China Zoological Conference held in Kwangtung. At a scholarly meeting of ecologists and classification specialists he submitted 13 scientific reports written by himself or in collaboration with other scientists. He also made a report on the kinds of birds and their distribution on Hainan Island. He is now preparing to return to Hainan to do further research. He said that the number of different kinds of birds on Hainan Island is not less than 300 according to preliminary statistics.

#### TECHNICAL SCIENCES

CONFERENCES HELD IN POWDER METALLURGY AND SEMICONDUCTORS -- Peiping, Kuang-ming Jih-pao, 20 Dec 62, p 2

The first conference ever held in China on powder metallurgy and the second conference on semiconductor technology were held recently in Peiping.

The conference on power metallurgy was jointly convened by the Chinese Society of Mechanical Engineering and by the Peiping Society of Mechanical Engineering. Powder metallurgy is recognized to be an advanced branch of technology; it is already being applied in the fabrication of hard-to-fuse metals, high-temperature alloys, pseudo-alloys, metallic ceramics, and porous perspiratory materials. Techniques of powder metallurgy have been employed for several years in China in

the electrical instrument, radio, and machine manufacturing industries. Sheet steel used in manufacturing of automobile bushings has been successfully made from an iron-powder-based metal. These bushings were found to last twice as long as those made of brass. The manufacture of these bushings, which are in great need in China, by this method thus saved large amounts of nonferrous metals.

Three special groups were formed to discuss the application of powder metallurgy in the fields of antifriction and machine parts, hard-to-fuse metals and hard alloys, and electrical instrument materials. The needs of agriculture were also discussed, primarily the need for large quantities of machine fittings such as piston rings, axle housings, [composite] bearings, etc. Research is already being conducted in Peiping, Shanghai, and Lo-yang on the use of powder metallurgy techniques in the manufacturing of piston rings.

During the conference, a small scale exhibition of powder metallurgy techniques was held. At the opening of the conference, this exhibition was visited by Vice-Chairman Jen Han-kuang (0117/7281/0342), Scientific and Technological Commission, and by First Vice-Minister of Machine Industry Shen Hung (3088/7730).

At the second national conference on semiconductor technology, 86 papers were read. The papers reflected progress in the chemistry and physics of silicon purification and the preparation of single silicon crystals.

For example, much better non-crucible zone purification of silicon has been achieved. Initial results have also been achieved in the growth of single low-germanium silicon crystals. New achievements have been made in the preparation of pure Group III-V compounds and single crystals.

Research has been actively pursued in the field of electronic and photoelectric apparatus. For instance, more detailed research has been done on the diffusion of phosphorous in silicon. Work has progressed in the field of tunnel diodes by such advances as a simplified method of graphing used in the analysis of large signals, the theory of the tunnel process, the theory of tunnel diode volt-ampere characteristics, and the theory of excess current. The problem of lifetime determination of germanium and silicon materials has been basically resolved.

There has been an uneven development of the various fields of semiconductor research: the preparation of superpure silicon, chemical element purification, chemical synthesis, chemical analysis, physical purification, methods of preparing various single crystals, pollution and defect research, and material testing.

HUPEH HYDRAULIC ENGINEERING SOCIETY HOLDS CONFERENCE -- Peiping, Kuang-ming Jih-pao, 4 Jan 63, p 2

The Hupoh Provincial Hydraulic Engineering Society met recently in Wuhan. The conference discussed some of the problems of the lacustrine region in the Hupoh Plain: topographic depressions, the high water level in the rivers and stream, the danger of floods, and the alternation of droughts and floods. It was decided to strengthen the restraining dikes and to do research on the problems of water drainage and irrigation systems.

WATER PUMPS DESIGNED BY TIENTSIN ENGINEERING COLLEGE -- Peiping, Kuang-ming Jih-pao, 19 Dec 62, p 2

During the last 4 years, the Tientsin Engineering College has designed six products for use in the field of agricultural mechanization that are now in small-scale trial production.

The "Model 105 Single-Cylinder Two-Stroke Internal Combustion [Engine] Water Pump" was designed in 1958; certain improvements were made in 1959 after consultation with the Chinese Academy of Agricultural Mechanization (Chung-kuo Nung-yeh Chi-hsieh-hua K'o-hsueh Yuan; 0022/0948/6593/2814/2894/2750/0553/4430/1331/7108). Since 1960, the Tientsin Engineering College has made further modifications of this engine so as to enable it to utilize such fuels as charcoal and bulk coal; now, it is even feasible to use such fuels as lumps of coal dust mixed with peat and certain types of white coal [Tasmanite] as fuel.

This college has also designed a "Steam Condensation Water Pump" which operates on boiler steam, rather than requiring high pressure steam.

ARCHITECTS AND DOCTORS DISCUSS HEATING OF PEASANTS HOMES -- Peiping, Kuang-ming Jih-pao, 19 Dec 62, p 2

Over 90 instructors from Harbin Medical University and architects from Liaoning, Kirin, and Heilungkiang provinces recently gathered in Harbin to discuss ways of improving the poor heating systems in peasants' homes in Northeast China. Studies made by personnel from Harbin Medical University showed that the average temperature within these homes during the winter months was 7-9 degrees centigrade. These low temperatures were blamed for the increased incidence of such diseases as rickets. The purpose of the conference was to improve the design of the "k'ang" used in these homes. [The k'ang is a bed of bricks heated by a fire; this is the normal method of heating homes in Northeast China.]

RESEARCH ON AGRICULTURAL MACHINERY CONDUCTED IN SOUTH CHINA -- Peiping, Kuang-ming Jih-pao, 23 Dec 62, p 2

The Research Institute of Rice Paddy Mechanization (Shui-tao Chi-hsieh Yen-chiu So; 3055/4470/2894/2750/4282/4496/2076) of the Ministry of Agricultural Machine Building Industry has designed several plows for use in rice paddies. The Research Institute of Tractors (T'o-la-chi Yen-chiu So; 2151/2139/2894/4282/4494/2076) of the same ministry has designed several tractors useful in submerged fields. The Research Academy of Rubber Industry (Hsiang-chiao Kung-yeh Yen-chiu Yuan; 2895/5231/1563/2814/4282/4496/7108) has also contributed by its design of tires that can be used in submerged fields.

TECHNICIANS EDUCATED IN TIENHSIN -- Peiping, Kung-jen Jih-pao, 22 Dec 62, p 3

Since its establishment in 1958, the Tientsin Ho-p'ing Workers Spare-Time Middle Technical School has graduated 5,892 students; at present, there are over 1,700 students taking courses at this school. Three specialities are offered: machinery, electrical engineering, and radio.

#### EARTH SCIENCES

SEISMOLOGY CONFERENCE HELD AT HARBIN -- Peiping, Kuang-ming Jih-pao, 5 Dec 62, p 2

At a seismology conference held recently in Harbin, 92 research reports were submitted. These reports covered such fields as area mobilization, earthquake-force theory, the question of earthquake-proofing industrial and civilian buildings, vibration experience, and instrument observation, which involve various aspects of seismic engineering. The conference gave its attention to earthquakeproof dams, national building standards and specifications for earthquake areas, and the development of seismological theory and observation.

Twenty-two papers were read on the statistical theory of seismic forces, computations on nonelastic structures, and other subjects. These papers have made it clear that the nation has laid down the preliminary foundation for earthquakeproof theory.

Research on the question of developing earthquakeproof dams in support of rural water conservation construction was given special attention at the conference. The delegates integrated experience in the investigation of certain water conservation projects and

discussed in particular the cause of, and a reinforcement program for, horizontal cracks which are produced at the water level of concrete buttressed dams as a result of earthquakes.

In the field of earthquakeproof construction in the rural areas, the Research Academy of Construction of the Ministry of Building submitted a report on extensive investigations in Kwangtung Province, which summarized certain effective earthquakeproof measures. During on-the-spot investigations, the academy discovered a house in which a brick pillar supported a heavy structure and a brick arch and a wall made up of lime and pebbles were not able to withstand the earthquake. The academy submitted this as evidence of the type of construction to be selected in the future in the construction of rural buildings.

In the field of industrial and civilian construction, the conference integrated national standards and specifications for construction in earthquake areas and discussed a decision on scale of seismic intensity, the question of computing seismic forces, and earthquakeproof designs and measures.

HANGCHOW UNIVERSITY GEOGRAPHY DEPARTMENT STRENGTHENS RESEARCH -- Peiping, Kuang-ming Jih-pao, 21 Dec 62, p 2

The Geography Department of Hangchow University has strengthened basic theoretical research this semester and has organized academic movements to promote research. Most of the basic theoretical research projects are based on teaching requirements. For example, the Natural Geography Teaching and Research Section will begin some advanced lecture classes on special problems for upper classes. It has mobilized teachers to engage in certain theoretical research projects. Instructor Wang Szu-chun (3769/0843/0971) did two special research projects, "Discussion on Several Questions on Our Country's Development of Demography From the Point of View of Foreign Demography," and "The Objectives and Tasks of Demography." These were of valuable assistance to the course entitled, "Summary of Economic Geography." The Geochemistry and Geomorphology Teaching and Research Section has done a summation on research on silt in the rivers and harbors of the Ch'ien-t'ang Chiang [River] by theoretically analyzing the research results obtained over the past several years. This has stimulated production departments and research organs. Besides this, the Natural Geography Teaching and Research Section has given its attention to the special features of local places in arranging topics for research. Topics include such items as, "The Plant community on the Southeast Bank of T'ien-mu-shan," Draft Program for the Hydrological Division of Chekiang Province," and "Hangchow's Landscape."

GEOLOGISTS INTENSIFY SEARCH FOR CHEMICAL FERTILIZER RESOURCES -- Peiping, Jen-min Jih-pao, 22 Dec 62, p 1

Over 3,000 geological workers and prospectors are presently engaged in the search for chemical fertilizer resources in China. Particular emphasis has been placed on the search for basic minerals containing sulfur, phosphorus, and potassium salts, as well as arsenic minerals and fluorspar, resources vital to inorganic agrochemistry.

Their prospecting has revealed phosphorus deposits in central Szechwan Province and iron pyrites in Kiangsu, Chekiang, and Kwangtung province.

At present, there are five geological teams continuing to prospect in Szechwan, Hunan, Hupeh, and Kansu provinces, and in Ningsia Hui Autonomous Region.

## CHEMISTRY AND CHEMICAL TECHNOLOGY

KIRIN MEDICAL UNIVERSITY IMPROVES LABORATORY TECHNIQUES -- Peiping,  
Kuang-ming Jih-pao, 21 Dec 62, p 2

The Bio-chemistry Teaching and Research Section of Kirin Medical University has in the last 2 years truly improved its laboratory teaching techniques. It requires that the student follow formal procedures in doing experiments, to be followed by a conscientious analytical summary of the experiment. Some experiments are verifiable but most are blood and urine analysis, which demand a rather high degree of accuracy. To improve the caliber of the student, laboratory teachers have since 1959 been doing preliminary experiments prior to laboratory class experiments. In doing the preliminary experiment, the teacher can control the margin of error and more accurately comprehend the purity and concentration of the chemicals used in the experiment. Thus, not many problems may develop and the teacher can accurately guide the student to meet the requirements of the experiment. For example, a teacher did a preliminary experiment on the determination of K'ai-shih Ting-tan (0418/3044/1353/5751). Following this, the special features and problems that arose were better understood. During the instruction period, student guidance was strengthened and certain questions stimulated the student to make inquiries.

At times, when the teacher performs a preliminary experiment he also discusses it theoretically. For example, recently a teacher did a preliminary experiment on biliary pigment to facilitate research on the metabolic process of the biliary pigment and other problems, such as the relationship between the several types of yellow jaundice and pathology and physiology. Research on these problems improved the analytical summary of the experiment.

Requiring the student to work out an experiment design before he does the experiment is also one of the ways whereby the Teaching and research Section has improved laboratory teaching. Such a procedure has played a very important role in developing the students' individual capability to do experimental work. In past years, students before going into the laboratory always lacked preparation and did experiments perfunctorily. There were many errors and poor results. In the last 2 years, however, the procedure of having the student work out an experiment design has enabled him to understand the basic principles involved and to inquire about these successive steps in the experiment and procedural techniques. When the experiment begins, the student can take a position of initiative and, according to his own experiment design, individually carry out the operation systematically and orderly.

Another method used by the Teaching and Research Section to improve laboratory experiments is to strengthen the students' formal procedures. In 1950, the section began "Precision Experiments on Recovery Rates." In this experiment, students instituted reliable methods to evaluate experimental results and understood every detail in the procedures. Everything was directly related to experimental precision. For example, "Precision Experiments on Recovery Rates" was applied to the determination of blood chlorides. Following this, the students clearly understood how chance error affects precision and how systematic error affects accuracy. The student's concept of qualitative determination was strengthened by strict compliance with operational procedures. The teacher observed all details of the experiment, made strict examinations, and gave guidance with patients. If an experiment was not up to standard, the work had to be redone. Besides this, the teacher paid extreme attention to the student's utilization and handling of experimental data.

Because the section adapted the above-mentioned procedure, all the students at the present time are capable of systematically meeting experiment requirements. After each experiment is concluded, the teacher conscientiously does an analytical summary of the experiment, informing the student of the reasons for his success or failure in his analysis. For example, after an experiment on the determination of residual nitrogen in blood, there develops a turbid phenomenon in an experiment, and the teacher guided the student in seeking the cause. In this case, it was partly due to improperly cleaned apparatus and partly due to the fact that the successive steps of the experiment were not handled properly. Besides this, when it comes to summing up, the teacher is especially attentive to integrating theory with the experiment to stimulating the student's inquisitiveness and to deepen his understanding the content of the experiment.

#### MISCELLANEOUS

PROGRESS AT LANCHOW UNIVERSITY -- Peiping, Kuang-ming Jih-pao, 5 Dec 62, p 2

Scientific research during the past few years has developed rapidly at Lanchow University. According to incomplete statistics, since September 1941 teachers of various departments have written 251 papers, of which 113 have been published.

Certain new results were achieved in the field of basic theory. In physics, detailed discussion was held on Fu-k'o's [possibly the Chinese approximation for Fuchs] constant coordinates as they relate to the general theory of relativity, which proved that the conditions of said coordinates possess sufficiency but in no way possess uniqueness. In

mathematical mechanics, research on nonlinear operator equations produced certain theoretically perfect new results regarding the qualitative properties and branch solution of the exponent of the operator equation. In organic chemistry, measurements of the inherited structure of hsi-pei-su (6007/6296/4790) basically demonstrated that structurally it has a two-oxygen position and six rings of solid structure.

Achievement was made in certain projects closely related to national economic construction. Research done on the Pai-lan melon made it evident that the expediting action of copper and manganese trace elements in sugar synthesis of the melon is greater than the analytic process, and methods to increase the sugar yield were proposed. Initial research on the transpiration of cover vegetation on sandy ridges in Min-ch'in Hsien furnished reference data for the theory of cover vegetation and moisture content. According to incomplete statistics, 40 percent or more of the teachers at Lanchow University are engaged in large and small research projects. The school has allocated assistants to professors of advanced learning and assigned personnel and equipment to important projects, thus consolidating and strengthening the initial research groups. These groups have trained cadres to have definite individual work capability and assistant personnel to raise their level, until all are now basically equal to their tasks.

ACHIEVEMENTS OF OVERSEAS CHINESE STUDENTS CITED -- Peiping, Kuang-ming Jih-pao, 31 Dec 62, p 2

During past 13 years, several ten of thousands of returned overseas Chinese students have come to China to study. They come from Africa, America, and Australia, as well as from Burma, Indonesia, Thailand, Malaya, Japan, Laos, Vietnam, and Cambodia.

Some of these students have studied in the Departments of Chemistry and Mathematics at Huach'iao [Overseas Chinese] University in Fukien Province. These departments were established in 1961. This university now includes a Physics Department and a Medicine Department. Over 100 instructors were assigned to this university this year by the Ministry of Education; these instructors came from such schools as China People's University, Peiping University, Tsinghua University, Peiping Normal University, and Fu-tan University. In 1959, 232 returned overseas Chinese graduated from universities such as Peiping and Tsinghua universities.

CONFERENCES HELD AT PEIPING UNIVERSITY -- Peiping, Kuang-ming Jih-pao,  
17 Dec 62, p 2

The Physics, Chemistry, and Geology and Geography departments of Peking University have recently held symposia. The students in the Physics Department were lectured by assistant department head Ch'u Ching-lin (5969/0646/7792) on experimental work. The Chemistry Department has held three of four symposia this semester.

POPULAR SCIENCE JOURNALS COMBINED -- Peiping, Jen-min Jih-pao, 28 Dec 62, p. 4

Beginning in January 1963, the magazines Chih-shih Chiu-shih Li-liang (Knowledge is Strength) and K'o-hsueh Ta-chung (Popular Science) will be combined and issued [monthly] under the title K'o-hsueh Ta-chung.

## BIOGRAPHIC INFORMATION

[The following biographic information on selected Chinese Communist scientific and technical personnel was taken from sources cited in parentheses.]

CHAO Chiu-chang, Professor; author of article, "High Appraisal of A Group Space Flight" in Russian. (Moscow, Priroda, No 12, Dec 62, p 95)

CHAO Mao-chai (6392/5399/7872), Shansi Hsiang-fen Hsien Veterinary Hospital; invited to lecture at the Veterinary Medicine Department, Shansi Agricultural College, on the subject of traditional veterinary medicine, in which subject Chao is a prominent specialist. (Peiping, Kuang-ming Jih-pao, 19 Dec 62, p 2)

CHAO T'i-sheng, coauthor with Engr N. N. Anosov of article, "Correct Organization Aids in Surmounting Difficulties," in Russian. (Moscow, Stroitel'stvo Truboprovodov, No 12, Dec 62, pp 9-10)

Ho Ping-lin (0194/3521/2651)

CHEN Ju-yu (7115/5423/3768)

Man and wife, both professors Chemistry Department, Nan-k'ai University; returned from the US to China in 1955; Professor HO is originally from P'an-yu, Kwangtung; he is assistant director of the chemistry department of Nan-k'ai University and currently is directing four research students; Professor CH'EN is originally from Fukien province; she is assistant chairman of the Tientsin Federation of Returned Overseas Chinese. (Canton, Chung-kuo Hsin-wen, 26 Dec 62, p 11)

HSIA Ching-nung (1115/2417/6593), professor, Physics Department, Chungshan University; subject shown in photo playing a board game. (Peiping, Kuang-ming Jih-pao, 12 Aug 62, p 2)

HSU Mao, affiliated with Scientific Research Physics Institute, Leningrad State University; coauthor with E. V. Frisman of article, "Light Scattering and Viscosity of Polyvarachlorostyrene Solutions in Butanone," in Russian. (Moscow, Vysokomolekularnyye Soyedineniya, Vol 4, No 12, Dec 62, pp 1839-1843)

LUO Hsiao-jui (6753/1321/3043), teaching assistant, Shantung Agricultural College; has been studying cabbage hybridization for the past 10 years. (Peiping, Kuang-ming Jih-pao, 5 Jan 63, p 2)

LIU Hsien-chou (0491/0103/3166), professor, Tsinghua University; author of a book, Chung-kuo Ku-tai Tsai Hung-yeñ Chi-hsieh Fang-mien ti Fa-ming (Ancient Chinese Inventions in the Field of Agricultural Machinery). (Peiping, Kuang-ming Jih-pao, 17 Dec 62, p 2)

LO Chin-huang (2867/6930/3552), assistant director of the Surgery Department Tientsin Hospital No. 1; returned to China as a medical student from Japan in 1953. (Canton, Chung-kuo Hsin-wen, 26 Dec 62, p 11)

P'U Che-lung (5543/5832/7893), director, South-Central Institute of Entomology, Chinese Academy of Sciences, and professor at Chungshan University; cited for aiding students of entomology at this university. (Peiping, Kuang-ming Jih-pao, 4 Jan 63, p 2)

SIDEN Ch'in-nang, cocauthor with V. A. Oleynik and Yu. K. Delimarskiy, of article, "Potentials of the Decomposition of Titanium, Molybdenum, and Tungsten Acids Soluble in Molten Borax," in Russian. (Kiev, Ukrainskaya Khimiya, Vol 28, No 5, May 62, pp 599-604)

T'AN Chiung-lin (6223/8741/7792), lecturer, Mechanics Department, Kirin Engineering University; photo shows subject aiding students. (Peiping, Kuang-ming Jih-pao; 13 Aug 62, p 1)

TING T'ui (0002/7339), president of the Chinese Academy of Agricultural Sciences and professor and president, South China Agricultural College; cited for his 40 years of research on rice. (Peiping, Jen-min Jih-pao, 3 Jan 63, p 2)

WU Cho-nien (0702/3504/1628), professor, Agronomy Department, South China Agricultural College; inspected rice fields near Canton. (Peiping, Kuang-ming Jih-pao, 19 Dec 62, p 2)

C-O-N-F-I-D-E-N-T-I-A-L

WU Ting-fen, coauthor with A. F. Vishkarev and V. I. Yavoykiy of article,  
"Density of SMelted Slag," in Russian. (Moscow, Izvestiya Vysshikh  
Uchebnykh Zavedeniy Chernaya Metallurgiya, No 9 Sep 62, pp 66-79)

YANG Shih-te (2799/1709/1795), professor, Civil Engineering Department,  
Tsinghua University; cited for his assistance rendered to under-  
graduates. (Peiping, Kuang-ming Jih-pao, 1 Jan 63, p 7)

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C-O-N-F-I-D-E-N-T-I-A-L

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7 September 2004

Ms. Roberta Schoen  
Deputy Director for Operations  
Defense Technical Information Center  
7725 John J. Kingman Road  
Suite 0944  
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,



Sergio N. Alcivar  
Chief, CIA Declassification Center,  
Declassification Review and Referral  
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

## Processing of OGA-Held CIA Documents



The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0335308	78-03117A	194	1	23	4363	Scientific Information Report Chemistry And Metallurgy (26)	3/7/1963	71	Approved For Release	3/25/2004
AD0335625	78-03117A	197	1	3	4460	Scientific Information Report Chemistry And Metallurgy (27)	4/4/1963	51	Approved For Release	3/25/2004
AD0336825	78-03117A	199	1	26	4562	Scientific Information Report Chemistry And Metallurgy (28)	5/9/1963	70	Approved For Release	3/25/2004
AD0332150	78-03117A	183	1	5	3916	Scientific Information Report Chinese Science (11)	10/4/1962	52	Approved For Release	3/29/2004
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AD0336327	78-03117A	200	1	3	4578	Scientific Information Report Chinese Science (23)	5/2/1963	68	Approved For Release	3/29/2004
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AD0337777	78-03117A	202	1	27	4687	Scientific Information Report Chinese Science (25)	6/6/1963	52	Approved For Release	3/29/2004
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