ANNUAL REPORT, 1931.

THE year 1931 was a period of continuous growth for the Institute. The research programme of its departments has been carried out without obstruction, and important collections and scientific datae obtained which augur well for the future of the institution. The Institute has strengthened its relations with numerous scientific institutions, many of which actively co-operate with the Institute in its various fields of research.

We are glad to report that a number of distinguished savants have joined the Institute. Dr. E. D. Merrill, Director-in-Chief of the New York Botanical Garden; Sir C. V. Raman; Professor S. I. Metalnikoff, of the Pasteur Institute, Paris; and Professor Baron Michel de Taube, Member of the Institute of International Law, have joined the Honorary Advisors' Board of the Roerich Museum / Division of Science / . Compte du Mesnil du Buisson, Director of the Archæological excavation at Qatna, Syria, and Lecturer at the Ecole du Louvre, and Professor Guiseppe Tucci, Member of the Royal Italian Academy, have become Corresponding Members of the Institute.

It is a pleasant duty to express here the sincere gratitude of the Institute's Staff to our Founders, Madame and Professor de Roerich, and to the Board of Trustees of the Roerich Museum, for their constant assistance and furthering of the Institute's plans.

DEPARTMENT OF ARCHÆOLOGY, RELATED SCIENCES AND ARTS.

During the past year, the department was engaged in the following activities:—

- Linguistic, Ethnographical, and Archæological exploration in Lahul / N.-W. Himālayas /, the cost of which was donated by Professor de Roerich.
- Work on the large Tibetan-English Dictionary to be published by the Institute.
- 3. The preparations of the first volumes of the series 'TIBETICA'. In June, 1931, the Institute's Staff was joined by Lama Lobzang Mingyur Dorje, a noted Tibetan scholar, and author of several publications on Tibetan grammar.

The Expedition left the headquarters of the Institute at Naggar, on the 10th of July, and after a rapid journey across the Rothang Pass, established

its headquarters at Kyelang, Lahul, from which place numerous excursions were undertaken to various places of interest.

- 1. (a) Linguistic Survey:—The work in this field was limited to the Tibetan dialect of Lahul, and was not concerned with the other Himālayan dialects found in the mountain valleys of the Bhaga, Chandra and Chandrabhaga rivers. The material collected contains a grammar of the Lahul dialect, a vocabulary, texts of songs and descriptions of ceremonies. It was observed that the Lahul dialect has two sub-dialects: that of Kolong in the upper Bhaga Valley, and that of Koksar in the upper Chandra Valley. Both the sub-dialects were found to possess a distinct system of tonemes—a fact previously left unrecorded.
- (b) Ethnographical collection:—Every effort was made to secure a representative collection of objects illustrating the everyday life of the Lahul hillmen. This summer's work resulted in an interesting collection of wood-carved Tibetan furniture, some of whose ornamental motifs curiously remind one of Nordie wood-carvings.
- (c) Archaeological Survey: Work has began on the archaeological survey of the region. For many years numerous burial grounds in Lahul have been known to exist, popularly designated under the local name of čii-wei romk'an / colloquial for phyi-ba'i ro-khan / - The late Dr. A. H. Francke in his 'History of Western Tibet' / London, 1907 / and the Kangra District Gazetteer / (Kulu, Lahul, Spiti). Lahore, 1917 / mention the existence of ancient burial grounds, which according to them were left behind by some invaders coming from the North. No attempt was made to survey or investigate these burial grounds, or to classify them according to their respective types. In view of the importance of ancient burial grounds for the early history of Tibet, the Director conducted a rapid survey of the sites. This survey in the Bhaga and Chandra river valleys convinced him of the existence of at least three kinds of burials. It is still impossible to ascertain the dates of these burial grounds, for this would necessitate proper excavations, and not the mere examination of graves opened by inhabitants. The known burial grounds can be classified according to three definite types of burial:
- (a) Graves representing a hole, about 2-3 feet deep, covered by a large stone slab. Average length of stone slab about 5 feet, breadth about 3 feet. The orientation of the graves is very uncertain, most of the graves so far discovered seem to be orientated from North to South. There is nothing on the surface to tell of their existence, and most of the known graves have been discovered during field works, excavations of house foundations, and road building.

Graves of this type were discovered in the vicinity of Kyelang village. Their inventory is extremely poor. Most of the iron implements found in the graves have rotted away beyond recognition. The human remains turned to dust, and a few insignificant bone fragments is all that is usually found.

A second similar burial ground is found at the confluence of the rivers Chandra and Bhaga. Here the graves are surmounted by small tumuli of an average height of 1-2 feet / length 7 feet, breadth 4 feet /. Popular tradition says that these graves were left behind by invaders from Guge.

- (b) The second type of burial is seldom found, and probably represents the most ancient type of burial, so far discovered in Lahul. As far as I know only one grave of this kind was discovered near Kyelang by the road side from Kyelang to Gumrang village / about two miles from Kyelang / . It represents a circular hole inlaid with large flat stones. The shape of the grave bears a striking resemblance to an urn. The grave was excavated by some local inhabitants, and according to them nothing was found in it, except some decayed fragments of human bones, and some small fragments of pottery. The utter state of decay of human remains, and the almost total absence of inventory, may indicate the fact that we find ourselves in the presence of a burial in which the human body was out to pieces and the flesh separated from the bones-a common type of ancient Tibetan burial of the pre-buddhist period. This last type of burial should be connected with the Ladak graves discovered by the Moravian Missionaries at Teu-ser-po in the vicinity of Leh. Further researches will no doubt discover other graves of similar type and will help to solve the problem. The Leh graves belonged to a long-headed race, closely akin to the nomad races of Tibet.
- (c) The third type of burial is represented by groups of large tumuli, and is said to have been left behind by a body of Mongol-Tibetan troops who raided the Bhaga and Chandra valleys, during their attack on Ladak in the reign of king bDe-legs rnam-rgyal / about 1640-1680 /. According to popular tradition / no written account exists of the raid to Lahul, as far as I know / a detachment of Mongol-Tibetan troops invaded Lahul across the Baralacha Pass, and remained in the country for several years, or, as says the oral tradition, 'such time as was needed for an apricot seed planted by the invaders to grow into a young tree'. According to the same oral tradition the Mongol-Tibetan troops built a fortified camp at the confluence of the Bhaga and Chandra rivers on a high river terrace facing the ancient Buddhist monsstery of Ghandhola. The place is still called K'ar-ga / mKhar-ka / and is characterized by the remains of an ancient fort. Whether this fort belongs to this period / XVIIth century /, or was built by Lahulis remains to be seen. The

second site connected with the name of the Mongols is situated two miles from Koksar, not far from the Rothang Pass. According to the oral tradition, the Mongols were forced to abandon their camp at Koksar because of some disease during which time some 1,000 men died from it. The larger tumuli found in the vicinity of Koksar are said to contain each from 5 to 10 bodies of dead warriors. According to the same oral tradition the local inhabitants had to abandon their villages during this Mongol-Tibetan raid, and fled to remote places high up the surrounding mountains, seeking shelter in caves and well-protected places. The present inhabitants of Lahul know of several such places up the Bhaga river Valley, which still bear traces of a prolonged occupation.

Interesting material was gathered on the history of the buddhist monasteries in the Bhaga Valley. The material collected consists mostly of monastery records, and biographies or mam-thar of the founders of the monasteries. This material throws new light on the introduction of Buddhism into Lahul and the adjacent regions of Western Tibet. The Library of the Himālayan Research Institute is now in possession of a good collection of Tibetan xylographs dealing with the 'Lives' of the early teachers of the 'Brug-pa bKa'-rgyud sect.

- 2. A good Tibetan-English dictionary, embodying the results of modern researches in the fields of Tibetan linguistics and philology, has long been a great desiderata. Such a dictionary has now been undertaken by the Institute, and Lama Lobzang Mingyur Dorje and the Director have been placed in charge of this important task. The new dictionary will include besides the printed material found in the already existing Tibetan-English dictionaries, the rich material found in the Sanskrit-Tibetan and Tibetan-Sanskrit dictionaries printed in Tibet, the Mongol-Tibetan dictionaries printed in Mongolia, and Transbaikalia and the several important polyglot dictionaries published in China. Besides the above printed material, the compilers will add a vast material collected by them in the course of their researches. The Dictionary will include the Sanskrit equivalents of philosophical terms; loan-words, which will be traced to their origins wherever possible, and an extensive material from the colloquial language and the various living dialects of Tibet. Work on the dictionary was begun in June, 1931, and it is hoped to bring it to completion towards 1934.
- 3. The first volume of the series 'TIBETICA,' dedicated to the study of Tibetan antiquity and related subjects, will contain the Director's Study of the Tibetan Dialect of Lahul. This study will be accompanied by a collection of phonetically transcribed Lahuli texts and a vocabulary / Lahuli-English /. The volume will be issued in the course of 1932. Two more volumes are in preparation:—

- (a) Life of Atiça, by the mKhan-po mčhims thams-čad mkhyen-pa.
- (b) The History of Buddhism / čhos-'byuň / by Padma dkar-po. This important text will be edited in Tibetan, and followed by a translation, accompained by a copious commentary.

We express our sincere thanks to Professor de Roerich who laid the foundation of the series, by donating a sum of money to start a fund.

The following publications were prepared and issued in connection with the department:—

Col. A. E. Mahon, D.S.O.: Recent Archæological Discoveries in India. This article appears in this issue of the Journal.

G. de Roerich: Trails to Inmost Asia, Yale University Press, 1931.

A French and German edition of the same work are in preparation.

G. de Roerich: Notes on the Ethnography of Tibet.

G. de Roerich: Studies in the Kälacakra.

The Institute was represented at several important scientific Congresses held during the year. Madame de Vaux-Phalipau represented the Institute at the XVth International Congress of Anthropology, held in Paris in September, and read two papers by the Director entitled: Problèmes ethnographiques du Tibet: les tribus Goloks, and 'Origines ethniques et composition des populations nomades du centre de l'Asie'. At the same Congress the well-known scholar Dr. Bashmakov read a paper on the recent discovery of megalithic monuments in Tibet by the Rocrich Central Asiatic Expedition. At the XVIIIth Congrès International des Orientalistes, Dr. J. Rahder, Professor at the University of Leiden, read a paper entitled: The Activities of the Himālayan Research Institute of the Rocrich Museum.

DEPARTMENT OF NATURAL SCIENCES AND APPLIED RESEARCH.

The year's work of the Biological and Botanical Section of this Department, is described in the following report by Dr. Walter N. Koelz:—

'The biologist's work during the year 1931 was chiefly carried on through three expeditions: one through the Kangra Valley into the Great Indian Plains, one to Western Tibet, and one to the domains of the Rāja of Rāmpur Beshahr. In addition several of the side valleys of the Beas Valley were explored.

From January 18th to March 15th was spent in the first expedition. Extensive collections of birds and plants, and a few mammals were made in the

Kangra Valley at Negrota, on the Plains at the Gurdaspur marshes, around Lahore, and at Sirsa on the border of Rajputana. The plants of the Plains are of a totally different flora from that of the northern mountains, among them are found many of the drugs that the great Indian medicine men employ, and their study is of no less interest than the alpine plants of the Tibetan Pharmacopoeia. Big game is not abundant in this region, but fine representatives were obtained of the Indian Red Deer and the Black Buck, the game par excellence. The birds during the winter months are of the greatest interest. Mixed with the regular population are visitors from Persia, Afghanistan, Siberia, Tibet and all the lofty mountain ranges between. Specimens that one may find singly or in scattered pairs in their breeding haunts are here assembled in flocks. Huge blue cranes from Eastern Siberia may literally fill a five acre field, the magnificent Imperial Sand Grouse from Persia visits its watering places in thousands, the Accipitrines, among the rarest of birds in collections are assembled in great variety / of the 1,000 specimens of birds secured over 10 per cent. were of this group / , duck, geese, and snipe of many species, and other enormous flocks tarry here till spring calls them to their nesting grounds in Siberia and Tibet. Among the birds of the Plains the Ibis, the Spoonbill, Egrets, Bitterns, Storks, Cranes, Parrots, Barbets, Bustards, and Partridges constitute an interesting part of the collection. The Expedition to Western Tibet left headquarters on June 7th and returned on October 8, having covered 1,000 miles chiefly in the provinces of Rupshu, Ladak and Zangskar. Over 1,000 plant numbers constituting some 10,000 specimens, more than 1,000 bird-skins and 25 big game heads were collected. The big game included all the large mammals of the region: Ovis ammon, shapu, nabo, ibex, Tibetan gazelle, Kyangs, etc. The plant growth, as all Tibetan explorers have described it, is phenomenal. Up to 20,000 feet and more the vegetation ascends. It is a singular fact that of the flora of the snow line on the outside of the Great Himālayan Range practically none occurs on the great plateaus, not even the little Saxifraga flagellaris that extends all over the boreal world, even to the land below the North Pole. Unlike most plants of high altitude, the plants are often not dwarfed and insignificant. At 15,000 to 18,000 feet elevation there are many showy, well-grown, and often very fragrant representatives of the genera Potentilla, Ranunculus, Saxifraga, Pedicularis, Primula, Rosa, Clematis, Aster, Gentiana to mention only the most striking. The bird collection contains many things of scientific interest, among them several new records for the avifauna of the area and a new bird for the Indian Empire, the Giant Lark, Melanocorypha maxima, taken with its eggs at Hanle. A further report of the itinerary of the Expedition appears as the "Diary of the 1931 Expedition to Western Tibet" in this issue of the Journal, and detailed reports on the scientific results will appear when the various collections have been studied.

From November 4th to December 7th was spent in the Sutlej Valley in Rämpur Beshahr. A collection of 165 plant numbers, about 2,000 specimens, 5 big game skins, and over 600 bird-skins was brought back. Among the birds were representatives of the grouse and pheasants of the area and a number of species of other groups that range chiefly to the East and meet the limit of their range in the Sutlej Valley. Many species of plants were found in bloom, among them a good series of the bamboos and other grasses and several very attractive and fragrant flowered shrubs. Several interesting horticultural products were also obtained, among them a squash of very fine flavor that grows to more than 40 lbs, and seems to be confined to a very small cold valley. Seeds of these were gathered for distribution.

During the year by request of the various institutions the following material has been distributed abroad:—

Roerich Museum-an ornithological collection and 7 big game.

New York Botanical Gardens—a collection of 700 plant numbers representing 3,000 specimens, and 35 packets of seeds.

United States Department of Agriculture-45 packets of seeds.

Museum of Comparative Zoology, Harvard University—an ornithological collection.

Natural History Department, British Museum-one bird skin.

Jardins des Plantes, Paris-35 packets of seeds.'

Throughout the year, the New York Botanical Garden continued to cooperate with the Himālayan Research Institute in the study and classification of its botanical collections. The experiments with seeds sent to New York by the Himālayan Research Institute have given some very good results, and Dr. E. D. Merrill, Director-in-Chief of the New York Botanical Garden in his letter of June 9th, 1931, writes as follows:—

'Our Head Gardener reports that he is getting excellent results from the seeds sent by you; a great many of them have germinated, and we shall deliberately place the young plants out of doors this summer, with view to testing whether or not the perennial species will stand our winter climatic conditions. Needless to state, we shall be very glad indeed to receive further seeds from medium and higher altitudes in the Himālayan region and in Tibet. I am quite confident that many of the native species there will thrive under our climatic conditions.'

On March 10th, 1931, the botanical collection sent by the 'Urusvati' Himālayan Research Institute of the Roerich Museum was handed over to the

Jardin des Plantes of Paris. The Delegation of the French Association of Friends of Roerich Museum, headed by the Marquis d'Andigné, Member and former President of the Municipal Council of Paris, presented the collection to M. Louis Mangin, Member of the French Academy of Sciences, and Director of the National Museum of Natural History. Others speakers on this occasion were Madame de Vaux-Phalipau, President of the European Center of the Roerich Museum, and Dr. Georges Chklaver, Secretary-General of the European Center of the Roerich Museum, who pointed out the importance of the work accomplished by the Himālayan Research Institute. M. Louis Mangin expressed the gratitude of French science for the 'precious contribution made to their collection by the Himālayan Research Institute'.

BIO-CHEMICAL LABORATORY.

One of the aims of the Himālayan Research Institute is to conduct scientific research in the field of native pharmacopæia. It is our firm belief that the ancient medicinal usages of Tibet, China and India, representing centuries of unbroken tradition, have something to teach us and in some respects can furnish new data which will throw fresh light on pharmacological problems. This field is almost virgin, and the importance of this kind of research is recognized by the foremost specialists. The difficulties of this field of research are manifold. One has to gain the confidence of native medicine men, patiently work over thousands of pages of written records often compiled in an extremely difficult technical language, make oneself familiar with the native point of view, and above all to preserve to the last an open-minded attitude, for before one obtains precise data, one has to investigate a rich folk-lore material in which popular knowledge is frequently combined with phantastic legends of primitive religious creeds that crept into the technical text-books of native medicine. In many cases this medical knowledge is considered a sort of tabu, and the teacher will impart it to his pupil only on his deathbed. Frequently medical training is preceded by a rigorous observance of obscure religious practices which in their turn require investigation. In existing medical colleges the students have to work through an intricate system of learning, the outward difficulties of which often screen its real value. The text-books themselves can only be understood with the help of an experienced native scholar, well versed in all the technicalities of his subject. Each of these text-books belong to a particular system of medical knowledge and one has to make oneself familiar with the fundamental tenets of the system before one can successfully work through the text. These tenets are often given out orally or in the form of sūtras, that is short statements compiled in an extremely brief style which are incomprehensible without a commentary.

In order to successfully accomplish this task and to furnish a complete survey of the subject, the Himālayan Research Institute has established the

following programme of research work, which is now being carried out at the Institute's Headquarters at Naggar. The work can be classified under two divisions:—

- (1) Gathering of the material, and
- (2) The study of this material in the laboratories of the Institute.

For the first purpose, the Institute has established a herbarium of medicinal plants in local use; a collection of local materia medica with data furnished by native medicine men; a collection of native text-books on medicine and pharmacopœia. Native medicine men are invited to participate in research work and assist in the classification and interpretation of the available material. It is hardly possible to secure a good medicine man outside his native country and it is quite impossible to induce such a man to undertake a journey abroad; hence the necessity of establishing a research centre in the region itself and equipping it with modern means of scientific research. The Himalayas and the high table-land of Tibet have for centuries attracted the medicine men of China and India. A very large section of Chinese Materia Medica is constituted with herbs that grow in the Tibetan highlands. The same is true of Indian Pharmacopæia. The Himālayan Research Institute is well located to study and record these ancient traditions. The pressure of modern civilization causes the keepers of ancient traditions to retreat into the fastnesses of their mountains, with the result that local traditions are rapidly vanishing. What can be done to-day, will be impossible in a few years. This one has constantly to bear in mind. In the near future the Institute will begin the publication of a series of monographs, containing the results of the Institute's research work, translations of Tibetan Medical works and commentaries thereon.

The second purpose is the detailed study of this material in the light of modern research. This will be done in the laboratories of the Himālayan Research Institute, which it is hoped will be completed about the spring of 1932. These laboratories consist of the following divisions:—

- (a) General Bio-chemical Laboratory,
- (b) Organic and Pharmacological Laboratories,
- (c) Physical Laboratory.

A special section of the department is devoted to Cancer Research for we are in possession of interesting data which justify researches in the cancer field in this part of the world, in which cancer is relatively seldom found. The study of the local diet may bring important revelations.

The above laboratories will give ample opportunities to the members of the staff to test these ancient medical usages by modern scientific means and

will perhaps bring new solutions to some of the urgent problems of the Science of Life.

During the 1931 Expedition to Lahul / North-Western Himālayas /, the Director and Lama Lobzang Mingyur Dorje have collected a number of valuable Tibetan texts on native therapy and pharmacology, including the rGyud-bši, the Baidūrya sňon-po, biographies of famous Tibetan doctors, commentaries on the rGyud-bši, and several interesting gter-ma or 'hidden' books on medicine. All these works are at present deposited in the Research Library of the Institute.

A collection of medicinal herbs and drugs / containing 195 numbers / was also made with the help of native Tibetan lama-doctors.

Dr. C. Lozina, Medical Adviser to the Institute, who was in charge of this work, had to discontinue his work at the Headquarters due to family reasons. He left the Headquarters in March, 1931.

During the past period this department of the Institute was represented at the International Congress of Pharmacology, held in Paris during the summer of 1931. Dr. N. A. Dobrovolsky-Zavadsky has acquainted the members of the International Radiological Congress in Paris with the activities of the Himālayan Research Institute.

The Institute is very gratified to report that its Bio-chemical department has received liberal support during the past year. \$ 9,200 was donated by a friend of the Institute towards the erection of the Bio-chemical Laboratory at the Headquarters, and another sum of \$ 2,500 was presented by Mrs. Lionel B. Sutro for the Institute Fund for Cancer Research.

The building of the Bio-chemical Laboratory is well under way, and it is hoped to complete the construction before the monsoon period. The construction of the laboratory is supervised by Mr. V. A. Shibayev, Secretary of the Institute. An unfortunate delay of two months was experienced owing to difficulties in obtaining the needed supply of timber. This has been now secured and the construction can now proceed without further delays.

Plans are being made to erect a hydro-electric plant on a plot of land, the sale of which was sanctioned by the Government. Professor de Roerich has very kindly given the use of this plot of land to the Institute for the purpose of erecting the Institute's hydro-electric plant.

Madame and Professor de Roerich have also donated an additional plot of land for extension of the Institute's building in connection with the Bio-chemical Laboratory constructions.

During the past year Colonel A. E. Mahon, D.S.O., has conducted, as the official representative of the Institute, various negotiations with Governmental authorities, and we take this opportunity to express to him our sincere appreciation.

RESEARCH LIBRARY.

During the past year the Library of the Institute was considerably increased through grants of books and book-exchanges. Grants of books were received from the following and are here gratefully acknowledged by the Institute:—

Carnegie Institution, Washington, D.C.; the Ethnographical Society of Paris; Professor de Roerich; Dr. Rabindranath Tagore; Commandant C. J. Cauvet; Colonel A. E. Mahon, D.S.O.; Professor Perrot; Dr. Bernard Read, of the Peiping Medical College; Dr. Dobrovolsky-Zavadsky; Mr. T. E. McCullagh, and Georges de Roerich.

The first issue of the Journal of 'Urusvati' Himālayan Research Institute, edited by the Director, was published in July, 1931, by the Roerich Museum Press, New York. The first issue comprised articles by Dr. R. V. D. Magoffin, President of the Archæological Institute of America; Count du Mesnil du Buisson, Director of Excavations at Qatna, Syria; V. A. Pertzoff, M.A., of Harvard University; Dr. C. C. Lozina; Dr. E. D. Merrill, Director-in-Chief of the New York Botanical Garden; Mr. V. A. Shibayev, and the Director. This first issue was dedicated to Professor Charles R. Lanman, the eminent Indologist.

During the past year the Institute established an exchange of publications with the following Institutions:—

Carnegie Institution, Washington, D.C.

Smithsonian Institution.

U.S. Museum, Washington, D.C.

U.S. Dept. of Agriculture: Bureau of Plant Industry.

U.S. Dept. of Agriculture: Bureau of Entomology.

U.S. Dept. of Interior: National Park Service.

Union of American Biological Societies (University of Pennsylvania).

Association of American Medical Colleges.

American Institute of Chemists, Inc.

American Chemical Society (Ohio State University).

American Council of Learned Societies, Washington, D.C.

American Geographical Society.

American Library Association.

American School of Prehistoric Research (Yale University).

Oriental Institute (Chicago University).

American Oriental Society Journal,

School of American Research, Santa, Fe, New Mexico.

Mayo Foundation for Medical Education and Research (University Minnesota).

Elisha Mitchell Scientific Society (University of North Carolina).

Hahnemann Medical College and Hospital (University of Chicago).

New York Academy of Medicine.

National Medical Association, Newark, N.J.

Minnesota State Pharmaceutical Association.

Missouri State Medical Association.

Colorado State Medical Society.

Academy of Medicine, Cleveland.

Rhode Island Medical Journal.

Tropical Plant Research Foundation, Washington, D.C.

Gorgas Memorial Institute, Ancon, Canal Zone.

Panama Canal Zone Experiment Gardens.

Pacific Institute of Tropical Medicine (University of California).

Chicago Academy of Sciences.

Academy of Natural Sciences, Philadelphia.

California Academy of Sciences.

Kansas Academy of Sciences.

Colorado Scientific Society.

Tennessee Academy of Sciences.

Connecticut Geological and Natural History Society.

Nature Association, Washington, D.C.

Oklahoma Agricultural and Medical College.

Agricultural Experiment Station (University of Penn. State).

Agricultural Experiment Station (New Jersey State).

Agricultural Experiment Station (University of North Dakota).

Agricultural History Society, Washington, D.C.

American Museum of Natural History, New York.

Field Museum of Natural History, Chicago.

Metropolitan Museum, New York.

Colorado Museum of Natural History, Denver.

Natural History Museum, San Diego.

Los Angeles Museum of Natural History, Sciences and Arts.

Exchange of publications has also been started with the following Universities—(Depts. of Botany, Zoology, Bio-chemistry, Medicine, Pharmacology, or Archæology):—

Columbia University, New York.

Harvard University, Cambridge, Mass.

Yale University, New Haven, Conn. Cornell University, Ithaca, N.Y. Rutgers University, New Brunswick, N.J. Brown University, Providence, R.I. Pittsburgh University, Pa. Pennsylvania University, Phila., Pa. Medical College of Virginia, Roanoke, Va. Duke University, Durham, N.C. University of North Carolina, Chapel Hill, N.C. Purdue University, Lafayette, Indiana. Saint Louis University, St. Louis, Mo. University of Missouri, Columbia, Mo. University of Illinois, Chicago, Ill. Stanford University, Stanford, Cal. University of California, Berkeley, Cal. Ohio State University, Columbus, Ohio. Marquette University, Milwaukee, Wisc. Indiana University, Bloomington, Ind. State Univ. of Iowa, Iowa City. University of Michigan, Ann Arbor, Mich. University of Minnesota, Minneapolis, Minn. University of Oregon, Eugene, Oregon, University of Oklahoma, Norman, Okla. University of Nebraska, Lincoln, Neb. University of Nevada, Reno, Nevada. Vanderbilt University, Nashville, Tennessee, University of Texas, Austin, Texas, University of New Mexico, Albuquerque, N. Mexico. University of Washington, Seattle Wash.

An exchange of publications was established with the following learned institutions in France:—

Institut International d'Anthropologie. Société d'Ethnographie de Paris. Société de Géographie Commerciale. Office National des Plantes Médicinales. Muséum d'Histoire Naturelle.

The Institute has also established an exchange of publications with the following scientific institutions in India:—

Government of India, Geological Survey. Royal Asiatic Society of Bombay.

Journal of the Andhra Historical Research Society. Proceedings of the Bose Institute, Calcutta. Viçvabharati. Kashmir State Forest Department.

MUSEUM.

During the past period the Natural History Collections of the Institute have been considerably increased. A second room will be added to house the zoological collections. An Ethnographical collection has been started, and we gratefully acknowledge the gift of several objects of local ethnography donated by Professor de Roerich.

The nucleus of a museum has been started at the New York premises of the Himālayan Research Institute. At present two galleries are being organized: One to house the collection of Tibetan art brought back by the Roerich Central Asiatic Expedition, and another to house the botanical and zoological collection, gathered by Dr. Walter N. Koelz, biologist of the Institute.

During the year the Museum of the Institute in New York has received several important donations, which are here gratefully acknowledged:—

A Collection of butterflies from Sikkim, numbering 808 specimens donated by Mr. Svetoslav N. Roerich.

A mineralogical collection donated by Mr. Svetoslav N. Roerich.

A mineralogical collection donated by Mr. John Vlismas.

A mineralogical collection donated by the Paterson Museum, N.J.

One Tibetan dancing mask donated by Miss Esther J. Lichtmann.

ACTIVITIES IN NEW YORK.

The activities in New York during the past period have been supervised by Mr. Louis L. Horch, President of the Roerich Museum, and Mrs. S. G. Lichtmann. The office has been in charge of Miss Kathryn Linden. On November 10th, Miss Esther J. Lichtmann arrived in New York after a prolonged sojourn at the Himālayan Headquarters of the Institute, and took over the supervision of the activities of the Institute in New York. During her stay in India, Miss Lichtmann took an active part in the activities of the Institute, both at Naggar, Kulu, and Lahul, and her return to New York will no doubt help to further the Institute's future plans of research. It is a pleasant duty to express our sincerest thanks to Mrs. S. G. Lichtmann for her devoted care during the past period.

During the past period the following lectures were given under the auspices of the Himālayan Research Institute in New York; April 23rd,

Dr. E. D. Merrill spoke on 'Twenty-two years in the Philippines', dealing with the historical and ethnographical aspects, as well as the vegetation of these islands. On November 23rd, Dr. Clyde Fisher, Curator of the American Museum of Natural History, gave an address entitled 'With John Burroughs in his Favorite Haunts'. This last lecture was held under the joint auspices of the Himālayan Research Institute and the Master Institute of Roerich Museum, Mrs. Louis L. Horch, President of the Roerich Society, who lectured on Kulu Valley and the work of the Himālayan Research Institute during the past session, gave further addresses this year before the Washington Heights Woman's Club on March 24th, and the Book Club of Riverside Church, New York, on May 18th.

In the Autumn of 1931, the following campaigns were inaugurated for the purpose of promotion and acceleration of the wide programme of the Himālayan Research Institute:—

- 1. Fund for the Bio-chemical and Cancer Research Laboratories.
- 2. 'Urusvati' Himālayan Research Institute Fund.

Professor Nicholas de Roerich has graciously donated for these two campaigns, his painting 'Saint Pantaleimon, the Healer', post-card reproductions from his paintings 'Saint Pantaleimon, the Healer', and 'Agni Yoga', as well as his new book 'The Realm of Light'. The proceeds from the sale of these will be given to the above funds.

A special leaflet for the Bio-chemical Laboratory Campaign Committee was written by Mr. J. G. Phelps-Stokes, Chairman of the Committee.

The rapid growth of the Institute necessitates further efforts in order to carry out the whole programme of its manifold activities. After two successful years of field work, the Institute confidently enters the third year of its research work. In closing this Annual Report, let me quote from our President-Founder's address for the Anniversary of 'Urusvati' Himālayan Research Institute:

'Thus we enter the next year in full realization that our work is undeferrably needed, that the field of activity has been selected rightly and that the sympathy of friends and widest cultural circles promises a mighty expansion of the constructions for general usefulness. There, where is such general usefulness, we shall not withdraw and we shall uphold that enthusiasm which turns all obstacles into radiant possibilities.'

The Director.