wide geographical distribution of Members of Council, including provision for an additional Vice-President and an additional Member of Council representing each of the three existing Academies and the Indian Science Congress, and all these bodies have shown their co-operative spirit by duly appointing their representatives to the Council. The Fellowship of the Institute includes representatives of all sciences; of the scientific services, of the universities, of the research institutions, and of scientists employed by commercial and industrial organisations; and the National Institute represents the co-operative effort of men of all races, religions and branches of science in India. It is hoped that the country will be proud of this comprehensive organisation and that all scientists will regard it as an honour to be elected a Fellow thereof.

There is an urgent need in India for co-operation between men of different communities, and I take this opportunity to express the hope that we shall succeed in providing in this National Institute a bond between scientists throughout India and an organisation that will act by its existence and its success as an example and an encouragement to men of other walks of life, by showing what is possible in the way of co-operation between men of diverse and yet ultimately similar interests.

Science Notes.

X-Ray and Photographic Reversal.—Messrs. K. Prosad and B. N. Ghosh, Science College, Patna, write under date 23rd February 1935, "When materials are exposed to a beam of X-ray for the purpose of obtaining their diffraction halos, it is a familiar fact that the impression of the direct beam on a photographic plate on development, comes out sometimes dark and sometimes white. This phenomenon does not appear to have attracted sufficient attention, much less investigated in any detail.

While engaged in confirming with the help of X-rays, the results of structural analysis of some solids as obtained by the method of Latent Splitting (*Nature*, 1931, **127**, 90; *Bulletin, P. S. C. Phil. Soc.*, 1933, No. 3; 1934, No. 4; 1935, No. 5), the attention of one of us was drawn to the apparently irregular manner in which the central spot on the negative came out dark or white depending on the length of exposure. The appearance of the impressions suggested that the phenomena might be due to photographic reversals by X-rays. To test this suggestion, a systematic investigation has been undertaken using a Hadding tube. Exposures on Golden Iso Zenith plates of speed 1100, with 10 milliamperes fixed discharge at 50 KV. using a copper anticathode, have been given for times varying from 1 sec. to 5 hrs. The result has been a series of negatives of a highly interesting character in which opacity and transparency alternate with each other varying in intensity with time.

The first reversal, that is, transparency superposed on the opacity of the image appears for about 10 mts. exposure. The transparency then gradually increases until an exposure of about 2 hrs. is reached when an opacity is again superposed on the former transparency. This second opacity increases upto an exposure of about 3 hrs. At this point a second transparency sets in which slightly increases upto an exposure of about 3½ hrs. A third opacity then starts which increases upto an exposure of nearly 4¼ hrs. A third transparency is then again noticeable superposed on the last opacity and increases in magnitude upto an exposure of about 4¾ hrs. At this point a fourth opacity sets in which goes on increasing upto the maximum time of exposure of 5 hrs. given in these experiments. The differences between successive maxima of opacity and transparency gradually diminish and will probably disappear with still longer times of exposure.

Although the phenomena of one or two photographic reversals (R. W. Wood, *Phil. Mag.*, 1903, **6**, 577), with stimuli of different kinds used in certain order or those due to overexposure using ordinary light are well known, it is however not certain that several reversals with one kind of stimulus, specially with the X-rays, have been previously obtained. A very interesting account of the existing knowledge on the subject is given in Chapter XV of Allen's book on Photo-Electricity. Fuller details of the work will appear elsewhere."

* * *

Fossil Wood from the Bababudan Hills, Mysore.—Charles S. Pichamuthu writes that while examining the iron ore deposits of the Bababudan Hills during the Dasara vacation in the year 1932, the writer came upon a specimen of fossil wood near Kemmangundi. It was found near the 6th furlong of the 27th mile on the Chikmagalur to Lingadhalli road. The road here has been cut along the sides of the hill, and it was from this cutting that the specimen was obtained. The hill, which is 4,500 feet above sea level, is composed of red earth containing lumps of iron ore.

The woody material has been completely converted into hematite. As the fossil was of a rather friable nature, it was with great difficulty that it could be sliced. The specimens and sections were kindly examined by Professor John Walton, Professor of Botany in the University of Glasgow. He was of opinion that it was fossil wood, but considering the imperfect preservation of the structures, he did not like to say more than that it was of gymnospermous character. Recently, specimens were sent to Dr. Sahni who agreed with Professor Walton's identification.

The iron ores (as opposed to the banded ferruginous quartzites) of the Bababudans, have been, in part, segregated by the action of water through the ages. Some of the ores have

undoubtedly accumulated in standing bodies of water, solutions having leached the iron from the ferruginous quartzites. This specimen of wood must have been washed into one of these sedimentation areas and had its woody material replaced by oxide of iron.

It may be mentioned that there are, at present, no gymnosperms on these hill ranges.

* * *

The Porphyry Dykes of Mysore—A Study in Contamination.—B. N. Raghunatha Rao, writes that in describing the "Closepet Granites" of Mysore the Officers of the Mysore Geological Department have frequently noticed cases of local contamination of the acid magma by basic material. A very good example of such a contamination on a wider scale is afforded by the porphyry dykes of Mysore (Mandya and Seringapatam Taluks), which I have been recently studying. These dyke rocks appear to have consolidated from a highly contaminated magma due to the relatively more acid residual phases of the "Closepet Granite" magma having more or less assimilated portions of the basic country rocks such as the hornblende schists, chlorite schists and the pyroxene granulites—thus giving rise to the dykes of a monzonitic character. Among the chief evidences in support of such a view may be mentioned :—(1) the constant presence of basic xenoliths in these dyke rocks, in all stages of assimilation and recrystallisation, (2) the abundant development of sphene, apatite and magnetite in the proximity of these basic xenoliths, (3) the frequent occurrence of minerals such as melanite and spinel, and (4) the heterogeneity in the general character of the dykes occurring in a group—as for instance near Bethalli and Arakere.

Further work is in progress and a fuller paper dealing with the subject will be published elsewhere.

* * *

The Blue Colour of the Sky.—Dr. M. Zakiuddin writes: "In a previous communication (*Current Science*, 1934, 3, 83) I have mentioned about the interesting manuscript of Al-kandi dealing with the blue colour of the sky, a copy of which is preserved at Oxford (No. 877, *Katalog der Bodleiana von J. Uri.*, Bd. 1) and a copy of which has been recently discovered by H. Ritter (*Archiv. Orientalni Prage*, pp. 363-372, 1932). The manuscript has been also edited at Aligarh after a careful comparison as it has been found that the copy preserved at Oxford is full of mistakes.

It is interesting to note that Prof. E. Wiedemann (*Arbeiten aus den Gebieten der Physik, Mathematik, Chemie - Julius Elster und Hans Geitel*, pp. 118-126, 1915, called "Anschaungen von Muslimischen Gelehrten uber die blaue Farbes des Himmels"), of Edlangen has translated the Oxford copy. Wiedemann, however, mentions a very interesting manuscript dealing with the problem of the blue colour of the sky by the Egyptian jurist Qarafi (Eder—*Jahrbuch der Photographie and Reproduktintechnik*, 1913 and 1915).

Schihâb al Din Ahmed Ibu Idrio al Qarafie lived in Cairo and has written a book on 50 different problems of optics. He died about 1283-84. Of all these problems the problems No. 33, 34, 35 deal with the cause of the blue colour of the sky (*loc. cit.*).

Later on Wiedemann mentions of another manuscript of Qazwini (*vgl. Z. B.*, Qazwini Bd. 1, Text S. 170 von Ethe 347) that also deals with the same problem.

* * *

The Association of Special Libraries and Information Bureau (ASLIB) is to hold its twelfth annual conference at St. John's College, Cambridge, during the week-end beginning Friday, September 20. Particulars may be obtained from the Secretary of the Association, 16 Russell Square, London, W. C. 1. Sir Richard Gregory has agreed to accept re-nomination as president of the Association for 1935-36.—(*Nature*, March 1935.)

* * *

Seasonal Progress of Height Growth in Trees.—By H. G. Champion. (*Forest Bulletin*, No. 88, Silvicultural Series, 1934. Government of India Publication.)

"Data for the seasonal progress of height growth collected between 1922 and 1933 on 15 common Indian trees are examined and average curves derived. The marked variation in the increment curves in successive years is discussed in relation to the curves for temperature, rainfall and soil moisture, close agreements being few. The specific increment curves are classified into three types: (i) simple curve with single maximum (*Adina* and *Tectona*), (ii) curve relatively simple but with secondary maxima (*Terminalia*), (iii) curve complex with two or more primary maxima (*Shorea, Pinus* and *Eugenia*)."

* * *

The Distribution of Temperature in the Upper Levels of a Depression Originating in the Bay of Bengal during the Indian South-West Monsoon. By N. K. Sur (Indian Meteorological Department, *Scientific Notes*, Vol. VI, No. 62).

"During the period of activity of the south-west monsoon some depressions originate in the Bay of Bengal preceded by a well-marked fall of pressure in Burma. These generally move in a north-westerly direction through the central parts of India and reach the neighbourhood of Rajputana. Sounding balloon ascents at Agra, when one such depression was passing through Rajputana, show that the upper levels of air in its outer regions were characterised by temperature lower than the normal values for the corresponding heights in the monsoon season. The level of tropopause above the depression was also found to be lowered."

* * *

Goat Breeding Scheme for South India.—The Imperial Council of Agricultural Research, New Delhi, at their meeting on February 28, 1935, sanctioned a ten-year scheme for Goat breeding under the auspices and direction of the Arcot Mission Agricultural Institute, Katpadi. The anticipated and sanctioned expenditure is Rs. 84,172 including Rs. 5,480 as non-recurring and Rs. 78,692 as recurring expenditures.

OBJECTS OF THE EXPERIMENT.

The Madras Presidency is reported to have eleven million goats of a non-descript variety. Among them exist great differences as to colour, size, milking capacity and other characteristics associated with a definite breed. The purpose of this research project is to make a concentrated attempt to select certain types and strains and with a definite ideal in mind work toward the consolidation of desirable characteristics into a definite breed indigenous to South India. The

plan is to have 200 females in the milking herd of which half the number will be used to breed South Indian varieties pure; one-fourth blood from the Jumna-Pari from North India will be used and Surti blood from Western India on the remaining fourth. Comparative figures will be kept of such factors as milk production, hardiness, prolificacy, milking longevity, intervals between kiddings, suitability of various feeds and fodders and observations of diseases and their treatment.

Propaganda work will also be carried on educating the public especially the poorer village classes who cannot afford the risk of maintaining the better grade of cattle, in the advantages of the "Poor man's cow" especially for milk production to improve the rather poorly balanced villagers' diet. Animals from these improved varieties will be put at stud in the district to improve the local goats.

EXPENDITURES.

The Imperial Council has agreed to make the following sums available for the experiment :—

		Rs.
1.	Purchase of stock, office and dairy equipment	5,480
2.	Staff—Assistant, writer, maistry and coolies	26,928
3.	Feeding expenses for the goat herd ..	45,564
4.	Recurring, office, dairy and sundry expenses	6,200
	TOTAL EXPENDITURE ..	84,172

The American Arcot Mission agree to give the services of Mr. J. J. De Valois, the Principal of the Agricultural Institute, to supervise the work as well as to provide the necessary buildings of a very simple but suitable nature for the project.

The scheme was drawn up with the co-operation of the Madras Agricultural Department officers who were interested in the work the Mission was doing with goats on a very small scale. The Director of Agriculture, Madras, was largely responsible for securing the final approval of the Imperial Council authorities.

* * *

We have great pleasure in congratulating Dr. T. Vijayaraghavan, (at present) Reader in Mathematics in the Dacca University, on his election as Visiting Lecturer for 1936 by the American Mathematical Society. He is the first Oriental Scholar to receive the distinction, which is conferred on very able non-American mathematicians achieved hitherto only by a few European workers of the front rank. Vijayaraghavan's ability was first noticed during his undergraduate years by Prof. K. Ananda Rao of the Presidency College, Madras; his original papers were forwarded to Prof. G. H. Hardy in England who unhesitatingly placed him second, even at that early age to the late S. Ramanujam. He was awarded a special scholarship of over a thousand pounds by the Madras University for research in England under the guidance of Prof. Hardy, then at Oxford. He published three papers on Tauberian Theorems which have become an integral part of the standard literature on the subject. These and some other minor papers won for him the Doctorate Degree.

Subsequently he published his paper dealing with the famous Borel conjecture in the *Comptes rendus* of the Paris Academy in 1932.

Emile Borel, one of the outstanding mathematicians, made a highly plausible conjecture in 1899 on the orders of infinity of solutions of differential equations. It was immediately accepted by all, including Hardy, as true; but years passed by without a single proof in spite of all the efforts of the best mathematicians all over the world. The problem came to be ranked as one of great difficulty, being slightly less than those of the Riemann hypothesis, Fermat's last theorem and Goldbach's theorem. As such it was suggested by Hardy to the mathematical workers in his seminar lectures. After six years of quiet work, Vijayaraghavan proved Borel's conjecture as also that of others to be wrong, the conjecture, natural as it appears, being actually false! The little note referred to above ranks as one of the greatest achievements of recent mathematical thought, not only by its conclusions but in the elegance of method, finish of technique and incisive of analysis.

We wish all success to a scholar who is still young. We have no doubt that he will bear with honour a large share of the burden left upon mathematicians in India by the premature death of Ramanujam.

* * *

The Institute of Chemistry of Great Britain and Ireland (Indian Section).—The Annual General Meeting of the Indian Section of the Institute of Chemistry of Great Britain and Ireland was held at the University, Calcutta, on January 5th, 1935, Dr. H. B. Dunnicliff, D.SC., F.I.C., in the Chair.

The Report and financial statement presented by the Honorary Secretary was read and approved.

The following members were elected to the Committee for the year 1935.—

Mr. G. C. Mitter, M.SC., A.I.C., Bombay; Dr. R. H. Peacock, D.SC., F.I.C., Burma; Dr. E. Spenser, D.SC., F.I.C., Bengal; Dr. B. B. Dey, D.SC., F.I.C., Madras: Dr. J. N. Ray, D.SC., F.I.C., Punjab; Dr. S. Krishna, D.SC., F.I.C., United Provinces; Mr. G. W. Douglas, B.SC., A.I.C., Honorary General Secretary.

A number of matters relating to the proposed Sectional Rules and to the formation of subsections in India were discussed, the meeting terminating with a vote of thanks to the Chairman and Honorary Secretary.

* * *

International Society of Leather Trades Chemists (Indian Section).—The Annual Meeting of the Indian Section of the International Society of Leather Trades Chemists was held at the Bengal Tanning Institute, Calcutta, on January 6th, 1935, with Mr. B. M. Das, President, in the Chair. The Annual Report of the Honorary Secretary was read and approved. A number of matters relating to the Sections activities were discussed and the hope expressed that all those who were interested in the Tanning Industry in India would avail themselves of the facilities provided by the Society. The following are the Committee for 1935.—

President.—Mr. B. M. Das, M.A., M.SC.; *Committee.*—Messrs. B. B. Dhavle, M.A., A.I.C.; N. N. Dutt; R. F. Roll; C. O. Tattersall, B.SC., A.I.C.; G. W. Douglas, B.SC., A.I.C. *(Honorary Secretary).*

The meeting terminated with a vote of thanks to the Chairman and Honorary Secretary.

On the conclusion of the meeting the members present were shown over the Bengal Tanning Institute by the Superintendent, Mr. B. M. Das.

* * *

Association of Economic Biologists, Coimbatore.—At a meeting of the Association of Economic Biologists, Coimbatore, held on the 7th March 1935, Dr. F. J. F. Shaw, D.Sc., A.R.C.S., F.L.S., Director, Imperial Institute of Agricultural Research, Pusa, delivered an able address on "Chance and Error". On the 22nd March 1935, Dr. P. J. Gregory, M.A., Ph.D., F.R.M.S., F.L.S., delivered an illuminating lecture illustrated with lantern slides, on "the chromosome structure".

* * *

New Fellows of the Royal Society of Edinburgh.—According to an announcement in *Nature*, Dr. B. N. Desai, Assistant Meteorologist, Government of India, Dr. B. Narayanaswamy, Lecturer in Physiology, University of Patna and Mr. C. S. Pitchamuthu, Assistant Professor of Geology, University of Mysore, have been elected ordinary Fellows of the Royal Society of Edinburgh at a meeting held on 4th March 1935.

* * *

We understand that Col. C. A. Gill, K.H.S., I.M.S., Inspector-General of Civil Hospitals, Burma, and late Director of Public Health, Punjab, has been appointed to undertake an investigation into the Malaria Epidemic in Ceylon.

* * *

Dr. Ernest Muir, of the School of Tropical Medicine, Calcutta, will soon be leaving India after 29 years of work connected with leprosy relief and kala-azar, to become Medical Secretary of the British Leprosy Relief Association.

Dr. Muir first came to India in 1906 as a medical missionary to the U.F.C. Church Mission at Kalna, where he worked for 14 years. During the later part of his stay at Kalna he became greatly interested in the subject of Leprosy. He was responsible for starting the Leprosy Research Department at the Calcutta School of Tropical Medicine, in November 1920. Three fundamental problems in which he was interested in connection with Leprosy are (1) culturing of the organism responsible for leprosy on artificial media, (2) finding a suitable experimental animal susceptible to infection, and (3) the improvement in the treatment of leprosy, the present method being tedious and requiring prolonged treatment, Dr. Muir worked on these problems for 15 years, as a result of which India is now covered with a net-work of leprosy clinics. A heap of publications stand to his credit and in association with Dr. Napier he published a handbook on Kala-azar and with Sir Leonard Rogers a handbook on Leprosy.

* * *

According to a note appearing in *Chemical Age* the Government of India reports that two separate agreements have been negotiated with Imperial Chemical Industries, Ltd., in connection with the Company's proposal to erect an alkali factory. One with the Punjab Government dealt with the supply of limestone, and the other with the Government of India referred to the supplies of waste salt, brine and other products in the Khewra salt mines. The agreement with the Government of India provided for a five-year option to the company to take up a fifty-year concession for the exclusive right to obtain the salty material in question, for use in a factory, subject to the safeguarding interests of the Government of India and of those concerns already established and which were engaged in the production of refined table salt. (*Chemical Age*, 1935, 32, 230.)

* * *

The Chemical Engineering Congress of the World Power Conference will be held under the auspices of the International Executive Council from June 23-27, 1936, at the Central Hall, Westminster, London. Information regarding the Conference can be obtained from the Congress Office, 56, Victoria Street, London, S.W.1.

* * *

Report of the Third Imperial Mycological Conference.—The Imperial Mycological Conference, held once in five years, affords an excellent opportunity for discussing Plant Pathological problems in the British Empire. The third conference was held in London during September 1931, and was attended by Plant Pathologists designated from all over the Empire. India was represented by Dr. W. McRae and Dr. Chaudhuri. It is interesting to note that representatives of firms, manufacturing fungicides also attended the conference.

After the opening address by Sir Charles Howell-Thomas, K.C.B., K.C.M.G., Dr. E. J. Butler, C.M.G., C.I.E., F.R.S., the Director, reviewed the work of the Institute. He gave staggering figures of annual crop losses due to fungal diseases in Great Britain, the Irish Free State, Australia, Holland and Switzerland. Cereal losses alone were estimated at £100 millions annually. He deplored the apathy of Government towards organising this branch of Agricultural Science and emphasised the need of co-operation between the Plant Pathologist and the Plant Breeder. It is interesting to learn that scale insects in the Seychelles, were effectively controlled by fungal cultures, obtained from Mysore, of *Cephalosporium lecanii*, which parasitises green bug on coffee.

The discussion on administrative measures (including Legislation) against plant diseases resulted in the adoption of a resolution recommending a uniform health certificate throughout the Empire. The possibility of introduction of plant diseases by air transport was also discussed, and it was recommended that there should be a general prohibition of transport by air of living plants. Methods of standardization of insecticides and fungicides were discussed, with the representatives of manufacturing firms.

The report of the discussion on virus diseases of plants and Foot rot of cereals contains valuable facts. The need for simplification of control measures suited to the small cultivator was emphasised, and formed the subject-matter for discussion. The important subject of breeding and selection for immunity against plant diseases was also discussed, and papers were read on various tropical diseases. The delegates visited the Imperial Mycological Institute, and the East Malling Research Station.

* * *

Report of the Veterinary Director-General for the year ending March 31st, 1933 (George Hilton, V.S.M., A.R.C.V.S.), Department of Agriculture, Canada.—One of the most important activities of the Department was the prevention of importation of Epizootics especially, Foot and Mouth disease from Europe and the United States. Progressive measures for the control of Bovine

Tuberculosis have been adopted with the co-operation of the live-stock owners and public health bodies, with very satisfactory results. Attempts to similarly deal with bovine contagious abortion also which is gaining in prevalence are started. A Virus disease of foxes kept in captivity was studied which evidently resembles the distemper of dogs. A similar disease in sledge-dogs was investigated with the help of the Royal Canadian mounted police. Researches into Bovine Hæmaturia and Equine infectious anæmia (Swamp Fever) are undertaken besides other diseases.

At the Imperial Economic Conference, agreement was reached on several points, chief among which are reduction of the quarantine period for animals imported into Canada and curtailment of restrictions on Canadian cattle exported to Great Britain.

The most important feature of the report is, the splendidly organised campaign for the eradication of Bovine Tuberculosis. The measures adopted include, Single Herd policies, Accredited Herd plan, Supervised Herd plan and restricted area system. In some cities and towns the municipal tuberculosis order is in force under which dairy cattle are tested free with tuberculin and compensation is paid for reactors which are slaughtered. During the year, 79,805 tests were made and 987 reactors were slaughtered and compensated for under this order.—S. D. A.

* * *

Annual Report of the Imperial Institute of Veterinary Research, Muktesar, for the Year ending 31st March, 1934.—This report like its predecessors makes interesting and instructive reading. Details of the Establishment, Estate, Biological Products, Technical instruction, Publications by the staff and the financial position are furnished.

The following are some of the important findings in the Research Department :—

RINDERPEST :—Further tests with Goat Virus as an immunising agent against Rinderpest were conducted with encouraging results. This method of inoculation has been tried on a much larger scale in the provinces and the results are so satisfactory—mortality being negligible—that further extension of the work is predicted.

ANTHRAX :—Vaccination with formalinised tissues from animals dead of Anthrax were found safe for administration but the immunity conferred was not satisfactory.

BLACK QUARTER :—Finding immunity by muscle and culture filtrates not very effective, formalinised whole culture vaccines were prepared and used for the first time this year with very satisfactory results.

CONGENITAL AMAUROSIS :—Evidence has been produced to show that the blindness in calves often results from a deficiency of minerals or vitamins.

EPHEMERAL FEVER :—A case of this disease has been studied and it has been found possible to transmit it to healthy animals by inoculating the blood taken at the height of fever although animals in close contact would not contract it. As this disease seems to be of common occurrence in other parts of India, a more exhaustive study of it is imperative.—S. D. A.

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From a report appearing in *Statesman* of the 5th April, it is understood that the Royal Institution has decided to establish a Professorship of Astronomy and that Sir James Jeans has been nominated as the first holder of the Chair.

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The Health Commissioner of the League of Nations has arranged for a second course of instruction in Malariology which will commence at the King Edward VII College of Medicine at Singapore on the 29th April 1935. The theoretical and laboratory studies will continue until 2nd June after which the candidates will proceed in groups either to Malaya, Java or French Indo-China for a further period of practical field work extending over three weeks. Facilities will be provided for experienced Malariologists to pursue individual research during the period of the course and at other times by arrangement with the King Edward VII College of Medicine.

The object of the course is to complete the training of medical practitioners who are engaged or intend to be engaged in the work of malaria control in their own countries.

* * *

International Committee of Annual Tables of Constants—*A.T.C.*—We are informed through the courtesy of the General Secretary of this important organisation, M. Ch. Marie, 9, rue de Bagneux, Paris (VI), that the Academy of Sciences of U.S.S.R. has signed an agreement with the Committee of A.T.C.

This agreement guarantees for the coming five years an important contribution to the International Fund of the publication of A.T.C. In exchange the U.S.S.R. Academy of Sciences is to receive a certain number of volumes edited by the Committee of the A.T.C. These volumes are going to be distributed among the Universities and Scientific Institutions of the Soviet Union.

Similar agreements have been already signed with the French Government, the Helvetic Government and the Polish Academy of Sciences.

* * *

Hilger Catalogue F.—Spectroscopic and Other Accessories (54 pages, 9½ × 7 ins.; with index; issued gratis). Adam Hilger Ltd., 98, Kings Road, Camden Road, London, N.W. 1.—Adam Hilger Ltd. issue a series of eleven principal catalogues of which the present Catalogue F. is a member. It deals with the wide range of accessories and minor apparatus that can be supplied for spectroscopic and other purposes. Some idea of the variety of these can be judged from the fact that in its 54 pages the following are listed among a large number of other items :—

Condensing lens and mounts, mirrors, absorption tubes and cells, various types of spectroscopic slits and eyepieces, levelling tables, vacuum pumps, discharge tubes, sodium and cadmium lamps, arc and spark stands, AC—DC rectifier, pure and rare metals, Judd Lewis comparator, thermopiles, photo-electric cells, photographic materials, and publications.

On page 40 a description is given of a new type of galvanometer relay which is capable of increasing the sensitivity of galvanometer systems several hundred times.

A comprehensive index is included. Prices are printed in a separate price sheet, a copy of which accompanies every catalogue.

The same firm are also issuing free of charge, a convenient stiff card folder in which their catalogues may be kept ready for reference on the bookshelf.

From an *Associated Press* message, we learn that the Tibetan Government has consented to a British Expedition to Mount Everest during 1935-36. Mr. Hugh Ruttledge has accepted the invitation extended by the Mount Everest Committee to lead the expedition.

The Government of India have sanctioned 3 Himalayan Expeditions (1) Dr. Schiebe will lead a party of German Botanists, who intend exploring the botanical potentialities of Chitral, (2) Dr. Ph. C. Visser, the Netherlands Consul-General in India and Ceylon will lead another Expedition this summer to the Shaksgam area in Eastern Karakoram, which he has visited twice before, and (3) Mr. M. Escarra will lead a French Alpine Club Expedition next summer, to explore the peaks about Baltaro Glacier, including the well-known K_2, the second highest peak in the World.

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The first annual conference of the Bengal Pharmaceutical Association was held during the first week of April, Mr. H. Cooper, Ph.C., presiding. In the course of his address, Mr. Premananda Das, Ph.C., as Chairman of the Reception Committee, said that the Association has been planned to bring together on a common platform all manufacturers, wholesalers, importers, chemists and druggists and compounders with a view to facilitate mutual exchange of ideas, co-operation and help to eliminate misunderstanding, difficulties, drawbacks and the most unhealthy competition in price-cutting against each other. The Association intends to start a Journal of its own which will serve as a medium for discussing topics of interest to pharmacists and distributing information in the variations in prices in the World's market.

* * *

Death occurred on 19th March 1935 at the age of 73 of Dr. Carl Duisberg, Chairman of I. G. Farben-industrie and famous German Chemist who discovered benzopurpurin and benzozurin. He was an eminent economic thinker and industrial leader and held office as President of the Reich Federation of German Industry from 1925-1931.

* * *

We acknowledge with thanks the receipt of the following :—

"Agricultural Gazette of New South Wales," Vol. XLVI, Part 2, February 1935.

"Actualités Scientifiques et Industrielles,"- Nos. 176, 190-192, 196, 199, 201, 204, 206-207, 209-218, 221-222, 226.

"The Journal of the Royal Society of Arts," Vol. LXXXIII, Nos. 4292-95.

"Biochemical Journal," Vol. 29, No. 2, February 1935.

"American Journal of Botany," Vol. 22, No. 2, February 1935.

"The Journal of the Indian Botanical Society," Vol. 13, No. 4.

"The Journal of the Institute of Brewing," Vol. XLI (Vol. XXXII, New Series), No. 3, March 1935.

"Canadian Journal of Research," Vol. 12, No. 2.

"Chemical Age," Vol. 32, Nos. 817-820.

"Berichte der Deutschen Chemischen Gesellschaft," Vol. 68, No. 3.

"Experimental Station Record," Vol. 70, Index Number.

"Forschungen und Fortschritte," Vol. II, Nos. 7, 8, 9.

"Transactions of the Mining & Geological Institute of India," Vol. 29, Part 4, March 1935.

"Indian Trade Review," Vol. XIII, No. 75, March 1935.

"Monthly Statistics of the Production of certain selected Industries of India," No. 8, 1934-35.

"The Indian Forester," Vol. LXI, No. 4.

"Communications from the Kamerlingh Onnes Laboratory of the University of Leiden," Nos. 229-232 ; and Supplement No. 76 to Nos. 229-240.

"Forest Research in India," 1933-34, Part II, Provincial Reports.

"Bulletin of the Geological Institution of the University of Upsala," Vol. 24.

"Research and Progress," Vol. I, No. 1, January 1935.

"Half-Yearly Journal of the Mysore University," Vol. 7, No. 2.

"Memoirs of the Indian Meteorological Department,"—Vol. 6, Nos. 61-62 and Vol. 5, Nos. 46-60 Table of contents and errata.

"Nature," Vol. 135, Nos. 3408-3411.

"Natural History," March 1935.

"Acta Phytogeographica Suecica," VI, die-Verbreitung der Höheren Wasserpflanzen in Nordeuropa. By Gunnar Samuelsson.

"The Journal of Chemical Physics," Vol. 3, No. 3.

"Journal de Chimie Physique," Vol. 32, No. 2.

"Indian Journal of Physics," Vol. 9, Part III.

"Proceedings of the Indian Association for the Cultivation of Science, Vol. 18, Part III.

"The Indian Trade Journal," Vol. CXVI, Nos. 1499-1503.

"Arkiv för Zoologi," Band 27, Häftes 1 & 2.