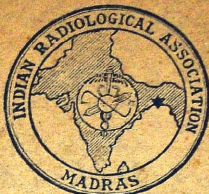


MADRAS

1946

THE FIRST

INDIAN CONGRESS OF RADIOLOGY



Madras Medical College

Wednesday 13th to Saturday 16th February, 1946

RADIOGRAPHIC contrast media

CHOLECYSTOGRAPHY

- * 'OPACIN' brand iodophthalein.
- * 'OPACOL' brand iodophthalein compound.
Pheniodol M & B.

BRONCHOGRAPHY

- * 'NEO-HYDRIOL FLUID' brand iodised ethyl esters of the fatty acids of poppyseed oil.
- * 'NEO-HYDRIOL VISCOUS' brand iodised oil 40% w/w iodine.

UROGRAPHY

- * 'URIODONE' brand diiodone solution
 - * 'URIODONE FORTE' brand diiodone compound solution.
 - * 'UROPAC' brand iodoxyl.
- Comprehensive Literature on Request.*

MAY & BAKER LIMITED

Distributed by MAY & BAKER (INDIA) LIMITED

* Trade Mark



AVAILABLE IMMEDIATELY

F U L L S T O C K S O F :

ILFORD X-RAY FILMS

ILFORD DENTAL FILMS

**ILFORD X-RAY DE-
VELOPERS and FIXERS**

**ILFORD INTENSIFYING
SCREENS and CASSETTES**

**Stored under ideal conditions in our own Cold Storage
Rooms at our four Branches**

ILFORD  **(INDIA) LTD.**

**B O M B A Y C A L C U T T A
L A H O R E M A D R A S**

THE
First Indian Congress of Radiology
Madras—1946



PRINTED AT
THE ANTISEPTIC PRESS
MADRAS

TABLE OF CONTENTS

	PAGE
OFFICE-BEARERS, INDIAN RADIOLOGICAL ASSOCIATION, CENTRAL COUNCIL, 1945	3
OFFICE-BEARERS, OF THE FIRST INDIAN CONGRESS OF RADIOLOGY, 1946, AND SECTIONAL CHAIRMEN	4
COMMITTEES AND SUB-COMMITTEES OF THE FIRST INDIAN CONGRESS OF RADIOLOGY	5
SOUTH INDIAN BRANCH OF THE INDIAN RADIOLOGICAL ASSOCIATION—OFFICE-BEARERS	6
HISTORY OF THE INDIAN RADIOLOGICAL ASSOCIATION	7
ANNUAL REPORT	9
ANNOUNCEMENTS	11
MESSAGES	12
PROGRAMME	13
LIST OF AMENDMENTS TO RULES AND REGULATIONS FOR CONSIDERATION AT THE ANNUAL GENERAL MEETING...	16
TITLES AND SUMMARY OF PAPERS	22
LIST OF ADVERTISERS	31
MEMBERS OF THE INDIAN RADIOLOGICAL ASSOCIATION IN ALPHABETICAL ORDER	32

OFFICE-BEARERS

INDIAN RADIOLOGICAL ASSOCIATION

Members—Central Council, 1945

President : —Dr. Subodh Mitra, Calcutta

Vice-President : — „ S. Mukherji, Calcutta

Hony. Secretary : —Capt. M. Mukherji, Calcutta
(Upto October, 1945)

Hony. Treasurer : — „ R. P. Banerji, Calcutta

General Secretary

and Treasurer :—Dr. P. Rama Rau, Madras
(Since October, 1945)

*Members :—*Dr. P. Rama Rau, Madras
(Upto October, 1945)

„ P. Chatterji, Calcutta

„ Ajit Mohan Bose, Calcutta
(Deceased, Dec., 1945)

Lt-Col. J. A. Shorten, Calcutta

.S. N. Chatterji, Calcutta

K. M. Rai, Madras (Since October, 1945)

Rao Bahadur Dr. M. J. Santhana-

krishna Pillai (Since October, 1945)
(Deceased Dec., 1945)

FIRST INDIAN CONGRESS OF RADIOLOGY

OFFICE-BEARERS

President : —Dr. M. D. Joshi, Bombay

Conference Committee

Chairman :—Dr. S. A. Jabbar, Hyderabad, Dn.

General Secretary : —Dr. P. Rama Rau, Madras

Secy., Scientific Section :—Dr. K. M. Rai, Madras

Treasurer : —Dr. U. Krishna Rau, Madras

SECTIONAL CHAIRMEN :

Diagnostic Section : —Dr. S. C. Sen, Delhi

Therapy Section : —Dr. K. P. Modi, Bombay

COMMITTEES AND SUB-COMMITTEES

SCIENTIFIC EXHIBITION.

Diagnostic Section and Radiographs of Anatomical and Pathological Specimens : { Dr. T. K. Sundaram
Dr. A. Narayanan Kutty Menon
Dr. A. Daniel

Therapy Section : —Dr. Y. Siddique
—Dr. S. Venkateswarulu
Exhibition Hall : —Dr. C. Bhadrach
—Dr. K. R. Doraiswami

Invitations, Programme, Brochure, Printing and Badges : { Dr. K. M. Rai
Dr. U. Krishna Rau
Dr. P. Rama Rau

VOLUNTEERS:

Captain :—Dr. M. N. Dasanna

Vice-Captain :—Dr. D. Damoder Das

Volunteers :—Mr. J. M. Khan

„ R. Anirudha Varma

„ M. Hashim Sait

„ K. I. Thommy

„ I. Prahlad

„ V. Vijayaraghavalu

„ B. Venkata Rao

„ G. V. Denis

„ S. C. Muthumani

„ S. V. K. S. Thangarajan

„ B. Balakrishna Shetty

„ D. Sundaraj

„ E. J. K. David

Miss Lalitha Loganadan

„ Indira Sambasivan

„ T. C. Vimala

„ S. Rajalakshmi

SOUTH INDIAN BRANCH
OF THE
INDIAN RADIOLOGICAL ASSOCIATION

OFFICE-BEARERS

President : —Dr. S. A. Jabbar, Hyderabad

Vice President : —Dr. (Miss) Ida S. Scudder, Vellore

General Secretary and

*Treasurer :—*Dr. P. Rama Rau, Madras

Joint Secretary, (Scientific

*Section) :—*Dr. K. M. Rai, Madras

*Members :—*Dr. A. O. Jacob, Trivandrum

Dr. A. C. Devaraj, Mysore

Dr. G. I. Benjamin, Vizag

Dr. M. P. Joseph, Cochin

Dr. A. Narayanan Kutty Menon, Stanley
Hospital, Madras

Dr. M.N. Dasanna, General Hospital, Madras

History of the Indian Radiological Association

The first meeting of the Indian Radiological Association was held on the 21st February 1931 at 148, Russa Road, Calcutta, and the late *Dr. Ajit Mohan Bose* was the Founder-President, and our present President *Dr. Subodh Mitra*, Founder-Secretary ; *Lt.-Col. J. A. Shorten*, *Capt. M. Mukherjee*, *Dr. K. B. Ghosh* and *Dr. N. G. Moitra*, were those who attended that first meeting. Soon the membership increased to about 30 from all over India. The following were elected honorary members:—

1932. *Dr. THURSTON HOLLAND*—Liverpool,
President, First International Congress of Radiology (Deceased).
Prof. GOSTA FORSELL—Stockholm,
President, Second International Congress of Radiology.
Dr. ANTOINE Beclere—Paris,
President, Third International Congress of Radiology (Deceased).
1934. *Prof. HANS R. SCHINZ*, Zurich.
President, Fourth International Congress of Radiology.
1935. *SIR J. C. BOSE*, Calcutta, (Deceased).
1937. *Dr. ARTHUR C. CHRISTIE*, Washington,
President, Fifth International Congress of Radiology.

On 30th March 1937 the Association was registered with the Registrar of Joint Stock Companies, Bengal, under Act 21 of 1860. There were 24 members at the time, some having resigned on account of differences with the Constitution and Rules of the I.R.A. membership. The activities of the Association declined somewhat during the war years. The Central Council resolved to have the First Indian Congress of Radiology at Calcutta at the time of the Obstetric and Gynæcological Congress in December, 1940 ; this could not be got through. In May, 1945, the Central Council resolved to have an annual Conference at the time of the Science Congress at Bangalore, but this was not practicable.

Subsequently I, with the co-operation of the late *Rao Bahadur Dr. M.J.S. Pillai* and *Dr. K. M. Rai* and in response to a resolution of the Central Council

communicated to me, attempted successfully to organise the South Indian Branch of the I.R.A. with 37 members on the rolls. This was inaugurated on the 4th of August 1945 by *Major-General J. P. Huban*, Surgeon-General with the Government of Madras. The Central Council was subsequently shifted to Madras and I was authorised to be the General Secretary for this Congress of Radiology. Radiologists all over the country were circularised and I am happy to say that, in response to the circulars sent, we have 136 members from all over India and Ceylon. This response made it possible for organising this Congress. The enthusiastic Founder-Secretary, *Dr. Subodh Mitra*, though a Gynæcologist of repute, had not only been actually practising radium and deep X-ray therapy, but has shown his interest and affection for the Science of Radiology by continuing to be the Secretary of the Association for the majority of years ever since its inception. You will agree that as the present President of the Indian Radiological Association, *Dr. Subodh Mitra* should feel highly gratified at this gathering and the present strength of the I.R.A.—fruition of work which he, with his enthusiasm, started 15 years ago.

P. RAMA RAU.

Indian Radiological Association

ANNUAL REPORT FOR 1945

OFFICE-BEARERS :

<i>President :</i>	—Dr. SUBODH MITRA	
<i>Vice-President :</i>	—Dr. S. MUKHERJI	
<i>Hony. Secretary :</i>	—Capt. M. MUKHERJI	<i>Up to October 1945</i>
<i>Hony. Treasurer :</i>	—Capt. R. P. BANERJI	<i>Up to October 1945</i>
<i>General Secretary & Treasurer :</i>	—Dr. P. RAMA RAU	<i>Since October 1945</i>
<i>Members of the Central Council:</i>	DR. P. RAMA RAU	<i>Till October 1945</i>
	„ P. CHATTERJI	
	„ AJIT MOHAN BOSE, (Deceased Dec. '45)	
	Lt. Col. J. A. SHORTEN	
	DR. S. N. CHATTERJI	
	„ K. M. RAI	<i>Since October, 1945</i>
	Rao Bahadur Dr. M. J. SANTHANA-	
	KRISHNA PILLAI—(Deceased Dec. '45)	

We regret to report the demise of our founder-President, Dr. Ajit Mohan Bose and the founder-President of the South Indian Branch, Rao Bahadur Dr M. J. Santhanakrishna Pillai. Dr. Bose was a pioneer in Medical Radiology and Electrology as also Hydropathy not only in Bengal but possibly in all India. Dr. Pillai was also a senior Radiologist and had retired recently from the post of Medical Superintendent, Barnard Institute of Radiology, General Hospital, Madras. In their demise, Radiology in the country has lost two senior workers.

This year we started to work on the schemes laid down by the Central Council whilst it was at Calcutta, with a view to increase the activities of the Association. As a first step the South Indian Branch of the Association was formed on 4th August 1945 with a membership of 37. Subsequent to this the Central Council was shifted to Madras and at the end of December the total membership of the Association rose to 136 as compared to 22 at the commencement of the year. We are now holding the first Indian Congress of Radiology although we have not been able to arrange for the inauguration of the Sir Jagadish Memorial Lecture this year which was also in the scheme. We hope to increase not only our activities but also see to the further expansion in membership.

We have on the rolls three honorary members.

The Accounts for the year are appended to this report.

Steps are being taken to transfer the registration of the Association to the Registrar of Companies at Madras.

M. MUKHERJI
P. RAMA RAU

This year's Secretaries, I.R.A.

Statement of Receipts and Expenses upto 31st December, 1945.

RECEIPTS				EXPENSES			
	Rs.	A.P.	Rs.	A.P.		Rs.	A.P.
Subscriptions received from 116 members ...	1,403	6 0			Clerk's salary for 4 months from September to December 1945 ...	60	0 0
Remittance received from Calcutta—Central Council Funds. ...	576	2 0			Postage and Telegrams...	109	2 6
					Printing ...	106	0 3
					Stationery ...	25	11 0
					Bank Commission on cheques received from members for collection	12	4 0
					Bank incidental charges	1	0 0
							314 1 9
					Balance ...		1,665 6 3
			1,979	8 0			1,979 8 0
					Cash with Bank ...	1620	12 6
					Imprest Cash with clerk	5	0 0
					Add :	1625	12 6
					Amount not realised by Bankers ...	83	4 0
					Less :		
					Uncashed cheques already issued	39	9 9
							1,665 6 3

P. RAMA RAU, General Secretary & Treasurer.

Announcements

CONFERENCE and Exhibition Hall

The Madras Medical College Examination Hall (Top floor of Pathology Block).

REGISTRATION

On the 13th afternoon and 14th forenoon at the entrance to the hall.

OFFICIAL BADGES

Office-bearers, Members of the I.R.A., and Reception Committee members will be given their respective badges as they register at the entrance to the hall.

SECRETARIAT

Will be at the entrance to the hall during days of Conference.

Invitations to social functions which you will get as you register—please inform your acceptance to the clerk in charge.

ENTERTAINMENT

At the Museum Theatre—tickets of admission are handed to you as you register.

CONFERENCE—DINNER

Connemera Hotel Ball Room—15th Feb. 1946, 7-45 for 8-0 p.m.

GROUP PHOTOGRAPH

At the Medical College Grounds on the 15th Feb. 1946, just before tea.

Note.—Coupons are enclosed for dinner and lunch. Members will kindly keep them and hand them over to the steward who will collect them at the lunches and dinner respectively.

Messages

Messages for the success of the Conference have so far been received from:

CANCER HOSPITAL, THE ROYAL FREE	— <i>London.</i>
COUTARD, DR. HENRI	— <i>Colorado, U.S.A.</i>
CUTLER, DR. MAX	— <i>Chicago, U.S.A.</i>
FORSSELL, PROF GOSTA	— <i>Stockholm.</i>
HEYMAN, PROF. J.	— <i>Stockholm.</i>
KIBKLIN, COLONEL B. R.	— <i>Mayo Clinic—Rochester, Minn., U.S.A.</i>
MAISIN, PROF J.	— <i>Louvaine, Belgium.</i>
MATHER & ROBERTS DRs.	— <i>Liverpool.</i>
McWHIRTER, DR. R.	— <i>Royal Infirmary, Edinburgh.</i>
MORRISON, PROF. WOODBURN	— <i>J.P.M. now in Egypt</i>
PATERSON, DR. RALSTON	— <i>Radium Institute, Manchester.</i>
SCHINZ, PROF. HANS R.	— <i>Zurich.</i>
SWANBERG, DR. HAROLD	— <i>Quincy, Ill., U.S.A.</i>

Programme

WEDNESDAY 13th Feb. '46

11 a.m. Meeting of the Central Council of the Indian Radiological Association.

- Agenda :*
1. Read report from the General Secretary for the period the Central Council has been in Madras, and approve of the actions taken and procedures adopted by him.
 2. New Membership.
 3. Determine provincial branches and decide what should be the share to be given to provincial branches (when established) from the subscriptions of the I.R.A.

11-30 a.m. Special General Meeting.

- Agenda :*
- " Resolved that the Registered Office of the Indian Radiological Association be transferred to Madras".
- " Resolved that a branch Office of the Association be kept at Calcutta".

11-35 a.m. General Body Meeting :

- Agenda:*
1. Read and confirm the proceedings of the Central Council Meeting.
 2. Appoint the Subjects Committee (to go into amendments to rules.)

12 noon Meeting of the Provincial Branches to elect office-bearers or organising secretaries for those branches.

3-30 to 5-30 p.m. Registration.

5-30 p.m. Opening of Exhibition by Dr. (Miss) Ida S. Scudder, Principal Emeritus, Missionary Medical College for Women, Vellore, South India.

7-30 p.m. Soiree. A social-get-together of invitees and members : Hosts : Victor X-ray Corporation (India) Ltd.

THURSDAY
14th Feb. '46

9 to 11 a.m.

Registration.

11 a.m.

Inauguration Session (Examination Hall, Madras Medical College.)

Condolence resolution on the demise of Dr. Ajit Mohan Bose and Rao Bahadur Dr. M. J. S. Pillai—
Moved by Dr. Subodh Mitra, President I.R.A.

1. Call to Order—Dr. P. Rama Rau.
2. Chairman's Welcome—Dr. S. A. Jabbar.
3. I.R.A. President's Address—Dr. Subodh Mitra.
4. Inaugural Address by Major General J. P. Huban O.B.E., K.H.S., I.M.S., Surgeon General with the Government of Madras (Anti-Cancer Campaign)
5. Induction of incoming President by Dr. Subodh Mitra.
6. President's Address—Dr. M. D. Joshi.
7. Vote of thanks—Dr. K. M. Rai.
8. Secretaries' announcements.

1-30 p.m.

Lunch—Students' Common Room, Madras Medical College—Address by Lt. Col. K. G. Pandalai, I.M.S. (Retd.)—Hosts: Messrs. Kodak, Ltd.

3 to 5 p.m.

Scientific Session (Diagnosis).

5-15 p.m.

Tea—Host Dr. P. Rama Rau at his Radiological Institute.

6.30 to 9 p.m.

Variety Entertainment at the Museum Theatre, Egmore, in aid of Anti-Cancer Campaign funds, sponsored by the Staff Club, Barnard Institute of Radiology.

FRIDAY 15th Feb. '46

8 to 10 a.m.

Visits to Hospitals and Institutions

11 to 1 p.m.

Scientific Session: Therapy.

1-30 p.m.

Lunch—Students' Common Room, Madras Medical College—Hosts: Messrs Ciba (India) Ltd.

3 to 5 p.m.

Scientific Session: Therapy contd.

5-10 p.m.

Group Photograph—Madras Medl. College grounds.

FRIDAY 15th Feb. '46

—(Contd.)

5-15 p.m.

Tea-Host Dr. K. M. Rai (Madras Medical College grounds.)

8 p.m.

Conference Dinner: Address by Dr. Sir A. Lakshmanaswami Mudaliar, Vice-Chancellor, University of Madras (Connemara Hotel.)

Speeches :

SATURDAY

16th Feb. '46

8 to 10 a.m.

Visits to Hospitals and Institutions.

11 a.m.

General Body Meeting—Annual General.

Agenda :

1. To receive and consider the report of the Central Council and the accounts of the Association for the past year.
2. Election of Office-bearers and members of the Central Council.
3. To elect Auditors.
4. To consider starting a quarterly journal and elect a Journal Committee.
5. Read the rules and regulations of the Indian Radiological Association.
6. Consideration of amendments received and adoption of the rules and regulations if amended (Rule 54)—*vide page 14*.
7. Selection of venue of next Conference.
8. Any other business that may be regularly brought forward.
9. Conclude Conference.

12-30 p.m.

Meeting of the Members of the New Central Council

1-30 p.m.

Lunch—Host: Dr. S. A. Jabbar, Students' Common Room.

List of Amendments to Rules and Regulations

Existing Rule

Rule 3. To promote so far as relates to the subjects enumerated in paragraph (2) improvements in law, and to support or oppose alterations therein, and for such purposes to petition Government and take such other steps as may be deemed expedient.

Rule 6. To publish and circulate a journal which shall be the official organ of the Association.

Rule 18. Medical practitioners possessing qualifications which are registered with any one of the Provincial Medical Councils of India and physcists, electrical engineers possessing degrees or diplomas of recognised Universities and who are interested in the practice of the speciality of Radiology in one or more of its following branches, viz.—

Radiology, Radio-therapeutics and Radium Therapy, Electrology and Electro-therapeutics,

are eligible for Ordinary and Life membership of the Association.

Rule 19. Those who are interested in the science of Radiology, Radio-therapy, Radium therapy, Electrology and Electro therapy but do not possess the qualifications mentioned in clause 18 be admitted as Associate Members.

As passed in the General meeting held on 3rd April, 1937.

Amendments Received

To promote so far as relates to the subjects enumerated in paragraph (2) improvements in law and to support or oppose alterations therein, and for such purposes to take all necessary measures.

To publish and circulate a journal which shall be the official organ of the Association either independently or in association with any other journal.

Medical practitioners possessing qualifications which are registered with any one of the Provincial Medical Councils of India and who are engaged in the practice of the speciality of Radiology in one or more of its following branches, viz.—

Radiology, Radio-therapeutics and Radium Therapy, Electrology and Electro-therapeutics, are eligible for Ordinary and Life membership of the Association.

Members of the medical profession possessing qualifications registered with any one of the Provincial Medical Councils of India and who are interested in the science of Radiology and Electrology but are not engaged in the exclusive practice of this speciality, Physicists, Electrical Engineers possessing Diplomas or Degrees of recognised Universities or Engineering Institutions and others interested in the science of X-rays, Radio-activity, Physiotherapy and allied sciences who, in the opinion of the Central Council, are likely to be a valuable acquisition to the Association, may be admitted, at the discretion of the Central Council, as Associate Members of the Association on the recommendation of two Ordinary or Life Members of the Association.

Existing Rule—Contd.

Rule 22. Payment of a subscription of Rs. 150/- only shall, until otherwise determined by the Council, entitle an Ordinary Member to Life Membership. This shall not include the entrance fee, nor shall any reduction be made in respect of annual subscriptions already paid.

Rule 23 (e) Every Ordinary Member shall be entitled to a copy of each issue of the journal of the Association and other publications.

Rule 25 (a) Ordinary members shall be elected in the manner prescribed by the Byelaws of the Association.

(b) Candidates for election shall be proposed in writing according to a form approved by the Council by two Ordinary Members of the Association, one of whom must have personal knowledge of the candidate.

(c) The names and qualifications of the proposed members shall be announced before the Council at their next meeting after the receipt of the nomination form. If approved by the Council the name shall be put up for election at the following ordinary meeting of the Association.

(d) Election shall be decided at the ordinary meeting by ballot in which one black ball in six shall exclude the candidate from election into the Association.

(e) When a candidate has been duly elected in accordance with Art. 25 (c) notice to that effect shall be sent to him by the Secretary together with a copy of the Rules of the Association and a request for the payment of the subscription of the current financial year. If the latter be not paid within three months of the date of election, the matter should be brought before the Council who shall have power to declare the election void.

(f) No election shall become effective until the annual subscription payable on such election shall have been paid.

Amendments Received—Contd.

Payment of a subscription of Rs. 400/- only shall, until otherwise determined by the Council, entitle an Ordinary Member to Life Membership. This shall not include the entrance fee, nor shall any reduction be made in respect of annual subscriptions already paid.

Every Ordinary Member shall be entitled to a copy of each issue of the journal of the Association and other publications provided these are issued independently by the Association, on payment of any charges that may be levied.

These rules should be suitably amended so that elections of new members can be expedited without unnecessary delay.

Existing Rule—Contd.

Ruel 26. Deleted as per resolution passed in the Annual General meeting held on 3-4-'37.

Rule 32. If the annual subscription of any member remains unpaid for longer than three months after the date of his election or after 1st of June in any subsequent year he shall be notified in writing to that effect and requested to pay the same within one month.

Rule 33. Members whose annual subscription remains unpaid for twelve months may, by resolution of the Council, be excluded from the Association, and he shall thereupon cease to be a Member and his name shall be removed from the register, but such removal shall not relieve him from his liability for the payment of the arrears of subscriptions due from him.

Rule 36 (a) Membership may terminate on the ground that the conduct of the member is detrimental to the honour and interests of the medical profession or of the Association and calculated to bring the Association to disrepute, or on the ground that the member has wilfully and persistently refused to comply with the Rules and Bye-laws of the Association. Such grounds and the termination of membership shall be determined at a General Meeting specially convened for the purpose, at which not less than half the total number of members shall be present in person and at least three-fourths of the members present and voting shall vote in favour of determination of such ground and termination of membership.

(b) No member whose conduct is under investigation or consideration under Rule 36 (a) shall be capable of effectually resigning his membership of the Association until the decision of the General Meeting be made known. No member whose membership has terminated under Rule 36 (a) shall be eligible for re-election within one year from the date of such termination.

(c) No member who shall by any means cease to be a member shall have any right to claim refund of subscription paid by him in advance, but shall remain liable for all moneys which may be due from him to the Association.

Amendments Received—Contd.

All Ordinary and Life Members of the Association including the Foundation members shall sign the Declaration Form which will be preserved as documents of the Association—(Appendix 2).

To be suitably amended so that there is no arrear after the end of February each year.

To be suitably amended so that those members whose subscription remains unpaid after February will be excluded from the Association.

Rules should be so amended that the decision can be taken by the Central Council and not by the General Body at a General Meeting.

Existing Rule—Contd.

Rule 39. The Officers and all members of the Council shall be elected at the Annual General Meeting.

Rule 40. The President shall hold office for one year and shall not ordinarily be eligible for re-election for the following session. The Hony. Treasurer and Hony. Secretary shall retire annually but will be eligible for re-election. Any casual vacancy in the office of the President, the Vice-president, the Hony. Treasurer, or the Hony. Secretary may be filled by the Council; but the person so appointed shall retain office only for the unexpired portion of the term of office of the person who vacated office.

Rule 41. No person shall be a member of the Council unless he is an Ordinary member of the Association.

Rule 42. The Officers and members of the Council shall take office immediately after the elections.

Rule 45 (e) To petition the Government, statutory or public bodies and persons as they will think fit in the interests of the Association and

Rule 47 (c) Special General Meeting.

Rule 50. A Special General Meeting of members may be called at any time by the Council for any specific purpose relating to the direction and management of the affairs of the Association, including any proposed alteration or addition to the Articles of the Association for the time being in force, and the Council shall at all times call such a meeting on a requisition in writing from six ordinary members specifying the business to be transacted thereat.

Amendments Received—Contd.

The Officers, except the President and all members of the Council except those nominated by the Branches, shall be elected at the Annual General Meeting.

The President for the next year should be elected by postal ballot sometime in September. (Detailed procedure should be laid down).

No person shall be a member of the Council unless he is an Ordinary or Life member of the Association.

Rules 40, 41 and 42 Should be re-drafted, definitely laying down when the new office-bearers assume their offices and when they vacate their offices and when exactly the Annual General Body Meeting is going to be held.

To approach the Government, statutory or public bodies and persons as they think fit in the interests of the Association and

Extra-ordinary General Meeting.

A Special General Meeting of members may be called at any time by the Council for any specific purpose relating to the direction and management of the affairs of the Association including any proposed alteration or addition to the Articles of the Association for the time being in force, and the Council shall at all times call such a meeting on a requisition in writing from at least 20 ordinary or life members specifying the business to be transacted thereat.

Existing Rule—Contd.

Rule 50 (a) On receipt of the requisition the Central Council shall forthwith proceed to call a Special General Meeting. In case the Central Council after the receipt of such requisition shall fail to convene a Special General Meeting to be held within thirty days after such receipt, the requisitionists may themselves convene a meeting but such meeting shall not be held after nine weeks from the date of such delivery.

Rule 51. One-fourth of the total number of members eligible for voting shall form a quorum at any General Meeting except for the purpose of Rule 36.

Rule 51. *Want of quorum* :—If within half an hour from the time appointed for the meeting, a quorum is not present, the meeting, if convened upon the requisition of the members, shall be dissolved; in any other case, it shall stand adjourned to the same day in the next week at the same time and place and if at the adjourned meeting quorum is not present, the members present, whatever their number, shall form a quorum.

Rule 54. The Association may from time to time, alter, add to, or repeal the Rules at a General Meeting at which two-thirds of the members present shall vote in favour of such alterations or repeals.

Rule 57 (b) No member who is in arrears of subscription for twelve months or more, shall be eligible for election to the Central Council nor for taking part in voting for such elections.

(c) The election of Office-bearers and members of the Central Council shall take place at the Annual General meeting and shall be by means of ballot. Members receiving the highest number of votes shall be declared elected. In case of there being a tie or ties there shall be a second election at the same meeting for the tie or ties.

Amendments Received—Contd.

On receipt of the requisition the Central Council shall forthwith proceed to call a Special General Meeting. In case the Central Council after the receipt of such requisition shall fail to convene a Special General Meeting to be held within 60 days after such receipt, the requisitionists may themselves convene a meeting but such meeting shall not be held after nine weeks from the date of such delivery.

The quorum should be fixed at either 15 or 20.

The adjourned meeting, if necessary, should take place on the following day.

Should be amended so that Rules can be added, altered, repealed or framed by a simple majority vote.

No member who is in arrears of subscription shall be eligible for election to the Central Council or any other office nor for taking part in voting for such elections.

The election of Office-bearers and members of the Central Council shall take place at the Annual General Meeting and shall be by means of ballot, if necessary. Members receiving the highest number of votes shall be declared elected. In case of there being a tie or ties there shall be a second election at the same meeting for the tie or ties.

Existing Rules—Contd.

Rule 58 (b) Any member of the Central Council excluding the President who shall, without notice to the Central Council, absent himself from three successive ordinary monthly meetings of the Central Council shall be deemed to have vacated his seat thereon. If the President shall, without notice to the Central Council, absent himself from six successive ordinary monthly meetings of the Central Council he shall be deemed to have vacated his seat thereon.

Rule 59. The Central Council shall ordinarily meet once every month.

Rule 60. Notice of such meetings specifying the date and hour of the meeting and the nature of the business to be transacted thereat, shall be sent to each member of the Central Council at least seven clear days before the meeting, except in cases of emergency when the President may call a meeting at a short notice.

Rule 61. The Secretary shall call ordinary meetings of the Central Council. The President may, whenever he thinks fit, call a special meeting of the Central Council. The Secretary shall, upon receiving a requisition signed by three or more members of the Central Council and specifying the nature of the business for which a special meeting is required, call a special meeting thereof within seven days of the receipt of such requisition.

Rule 65 (c) No resolution adopted or negatived at a General Meeting is to be reconsidered at a subsequent meeting unless either six months have elapsed, or at least fifteen days notice signed by the members is given and two-thirds of the members present vote for reconsideration at such subsequent meeting.

Amendments Received—Contd.

Drop the word "monthly" wherever it occurs.

The Central Council shall ordinarily meet twice a year.

Notice of such meetings specifying the date and hour of the meeting and the nature of the business to be transacted thereat, shall be sent to each member of the Central Council at least thirty clear days before the meeting, except in cases of emergency when the President may call a meeting at a short notice.

The Secretary shall call ordinary meetings of the Central Council. The President may, whenever he thinks fit, call a special meeting of the Central Council. The Secretary shall, upon receiving a requisition signed by three or more members of the Central Council and specifying the nature of the business for which a special meeting is required, call a special meeting thereof within thirty days of the receipt of such requisition.

No resolution adopted or negatived at a General Meeting is to be reconsidered at a subsequent meeting unless six months have elapsed.

List of Papers to be Read at the First Indian Congress of Radiology

TITLES OF THE PAPERS	AUTHORS
1. On a New Bone Disease (<i>Osteospondylosis Condensans Hereditaria</i>)	Dr. G. Politzer, M.D., M.M.R., and Weingarten, M.D.,
2. The Influence of X-rays on Regeneration.	Dr. G. Politzer, M.D., M.M.R.
3. X-ray Opacities in the Liver and their Interpretation.	Dr. P. K. Kronenberger, M.D., Hony. Radiologist, St. George's Hospital, Bombay.
4. An Estimation of the Value of Radiotherapy in the Treatment of Malignant Disease.	Dr. Quintus Peiris, Assistant Radiologist, General Hospital, Colombo, Ceylon.
5. A Study of the Relationship of the Pulmonary Vessels to the Bronchi by Injection of Radio-opaque Oil, Iodotol. into the Bronchi Pulmonary Veins and Arteries in the Cadaver.	Dr. A. N. K. Menon, M.B.B.S., D.M.R., Radiologist, Govt. Stanley Hospital, Madras.
6. Radiologist and Indian Society for Control of Cancer.	Dr. B.N. Khanna, M.B., B.S., D.M.R.E., Bikaner.
7. Cervical Rib as an Accessory Aid to Diagnosis in Tuberculosis.	Dr. A. H. N. Welikala.
8. Outlook on Malignant Disease from a Surgeon's Standpoint.	Rao, Bahadur, Capt. M. G. Kini, M.C., M.B., M.Ch (Ortho.), F.R.C.S. (E), F.R.S. (E), Superintendent, Stanley, Hospital, Madras.
9. A Report on 7 Years Experience with 400 K. V. High Voltage X-ray Therapy in My Private Practice.	Dr. P. Rama Rau, D.M.R. (Vienna).
10. A Comparative Study of the Biological Action on Tissues of Electro-magnetic Radiations of different Wave Lengths—Varying in quality from those produced at 60 K. V. to 1,000 K.V. and including Gamma Radiations of Radium.	Dr. K. Manjunath Rai, M.B., F.R.C.S. (E), D.M.R. (Lond.), Professor of Radiology, Barnard Institute of Radiology, Madras.
11. A Radiologist's Dilemma in a Mofussil Station.	Dr. K. B. Shetty, D.M.R. (Madras), Mangalore.
12. Outlook on Malignant Disease from a Physician's Standpoint	Dr. Khutumbiah, M.D., M.R.C.P. etc, Stanley Medical College, Madras.
13. An Analysis of the Results of Treatment by Roentgen Radiation for Inflammatory Condition in a Series of 1305 cases at the Barnard Institute of Radiology during the last six years.	Dr. C. Bhadriah, M.B., B.S., D.M.R. (Madras).
14. The Value of Roentgen Therapy in Ankylosing Spondylitis—An Analytical Study of 62 cases treated at the Barnard Institute of Radiology during the last four years with demonstration of a typical case.	Dr. Yusuf Siddiq, M.B., B.S., D.M.R. (Madras).
15. An Analysis of the Result of Treatment of Leucoderma at the Barnard Institute of Radiology during the last six years—With Superficial X-ray Therapy and Ultra-violet	Dr. C. Bhadriah, M.B., B.S., D.M.R., (Madras).
16. Some Observations on Barium Meal Investigations carried out in the X-ray Department of the General Hospital, Ernakulam, Cochin State.	Dr. M. P. Joseph, B.A., M.B., B.S., D.M.R. (Madras).

Titles and Summary of Papers

ON A NEW BONE DISEASE

(Osteospondylosis Condensans Hereditaria)

G. POLITZER, M.D., M.M.R. and R. WEINGARTEN, M.D.

The disease is radiologically characterised by the following symptoms:—

1. Condensation of cancellous bone tissue.
2. Concentric enlargement of bones.
3. Calcification of tendons and ligaments.
4. Exostoses as in typical cases of arthrosis (or spondyl-arthritis) deformans.

The most striking changes concern the ribs, which are thickened and condensed to an extent that the intercostal spaces are reduced to narrow slits through which the lungs cannot be visualized.

Second in importance are the changes in the spine. The vertebrae are ivory-like and the exostoses, calcifications of ligamenta flava and bone bridges reach considerable dimensions.

The pelvis gains a strange aspect due to ossification of the tendons and ligaments inserting on it.

Lesser changes—but of the same ilk—are found in the skull and the limbs.

Advanced cases show the typical neurological changes of the *amyotrophic lateral sclerosis*.

The clinical observations, the myelographic findings and the results of the microscopic examination of histological sections confirm our assumption, that the neurological changes are due to compression of the spinal cord by excessive growth of the adjacent bones.

The differential diagnosis is not difficult. The osteopetrosis (*Albers-Schoenberg's disease*) does not produce changes in tendons and ligaments. The melorheostosis (*Leri's disease*) affects only or at least predominantly one side of the patient. It does not lead to simple eburnation but to the appearance of streamlike structures—entirely absent in our cases.

Special attention was drawn to the exclusion of fluorosis, a disease which manifests itself under various aspects. But the examination of the water sources of the villages where the patients were living did not produce evidence of excessive contents of fluorine. Besides not only the patients themselves but

also the school-children of the villages were examined for the typical features of the teeth in flurosis (Mottling of enamel), but no trace of such changes could be detected.

The disease is strictly hereditary. All cases observed belong to two families only and are near relations.

We called the disease osteo-spondylosis condensans hereditaria after its predominant symptoms.

The Influence of X-Rays on Regeneration

G. POLITZER, M.D., M.M.R.

The lens of the salamander regenerates from the upper margin of the iris (*Wolff, Mueller, Fischel*). I repeated these experiments and I subjected the operated larvae to X-ray exposures of various duration. The regeneration became irregular. The lenses were solid (not hollow) from the very onstart, they were undersize, abnormally formed and pigmented. They underwent a cystic degeneration and were resorbed. Interpreting these results and tallying them with the findings contained in papers that appeared simultaneously and after mine, I have drawn the following conclusions:—

1. X-ray exposure depresses growth so that not a sufficient number of cells is available for the process of regeneration.
2. X-ray affects the growth more than the differentiation.
3. The damage of the cells remains latent until they are subjected to the strain of the extra effort involved in regeneration.
4. Multipotent cells are more sensitive to X-rays than cells of lesser potencies.
5. The different tissues produced during regeneration show different degrees of X-ray damage.
6. The relative radio-sensitivity of different tissues during regeneration corresponds to that of embryonic, not of adult tissues.
7. The regenerative potencies show already differences of radio-sensitivity and these are the same as those of the embryonic tissues.
8. Small X-ray dosages do not accelerate the process of regeneration.
9. Hyperregeneration has been observed, but these regenerates are always abnormal.

There are three indications for X-ray therapy, which concern regenerative processes in man:—

1. X-ray treatment of erosions of the cornea.
2. X-ray treatment of wounds.
3. X-ray treatment of fractures.

The complexity of these processes in man is discussed and the results obtained in the practical field are explained with special regard to concomitant factors as epithelial migration, formation of granulation-tissue and callus secondary infection.

X-RAY OPACITIES

In the Liver and their Interpretation

P. H. KRONENBERGER, M.D.,

Hon. Radiologist, St. George's Hospital, Bombay.

Opacities in the liver are comparatively uncommon, but not extremely rare. They can be discerned from superimposed extrahepatic shadows by radiographs in different views, cholecystography, and study of the liver shadow during different phases of respiration.

Intrahepatic opacities may be cast :

(1) By concretions, either a cluster of small calculi in dilated bile capillaries or by larger single or multiple stones in a liver cyst.

(2) By calcification—

(a) of a cyst, either hydatid or non-parasitary,

(b) arthropods, either *liguatula serrata* or *porocephalus armilatus*,

(c) old inflammatory lesions, as certified amoebic abscess, miliary tubercles, or gumma,

(d) calcifying tumours (primary carcinoma or haemangioma).

In most cases the number, distribution, localisation, size, and shape of these opacities allow the differential diagnosis which will be discussed.

Demonstration of 2 cases, one with characteristic features of a calcifying haemangioma, the other with those of 'liver stones.'

AN ESTIMATION OF THE VALUE OF RADIOTHERAPY

IN THE TREATMENT OF MALIGNANT DISEASE

QUINTUS PEIRIS,

Asst. Radiologist, General Hospital, Colombo, Ceylon.

1. An attempt is made to evaluate the efficacy of radium and deep X-rays in the treatment of cancer. The various methods available for the treatment of this disease is surveyed and how far they have been successful is stated.

2. A classification of cancer in as far as it can be treated with radium and deep X-rays is given.

3. It is stressed that education and propaganda could obtain greater immediate results than the provision of treatment facilities.

The Relationship of the Pulmonary Vessels to the Bronchi

By injection of Radio-Opaque Oil, Iodotol, into the
Bronchi, Pulmonary Veins and Arteries in the Cadaver

A. N. K. Menon, M.B., B.S., D.M.R.,

Radiologist, Govt. Stanley Hospital, Madras.

As there were no facilities for adopting Tomography, which would have been ideal for this study, the following method was adopted :

A lung from the cadaver was fixed *in situ* on a radio-transparent board and a plain A P and lateral radiographs were taken. Once the lung was on the X-ray table infinite care was taken to see that the position of the lung was not altered during this as well as the subsequent stages. Radio-opaque iodised oil (Iodotol) was injected with a pressure syringe into the main bronchus and an A P and lateral radiographs taken and marked as No. I. Iodotol was then injected into the pulmonary artery and an A P and lateral radiographs taken and marked as No. II. Lastly Iodotol was injected into the veins and a third set of A P and lateral radiographs taken and marked as No. III. Thus three radiographs were obtained, Mark No. I with only the bronchi visualised, Mark No. II with the artery and bronchi, and Mark No. III with the bronchi, artery and vein visualised. In the radiograph Mark No. I the bronchi markings were coloured red and by superimposing and correctly registering the radiograph Mark No. II over Mark No. I (bronchi coloured red) the markings produced by the artery could be made out. The arteries were coloured blue and the bronchi red. The third radiograph Mark III was then superimposed over Mark II and correctly registered. The bronchi and the artery were coloured red and blue as in Mark II and the remaining markings produced by the veins coloured green. Thus the radiograph mark III gives the relative positions of the bronchi, pulmonary artery and vein.

The following relationship could be made out. The branches of the pulmonary artery lie mostly above and to the outer side of the bronchi they accompany but at the extreme bases and apices they are on the inner side. The smaller branches of the pulmonary vein follow an independent course while the larger veins come into relationship with the arteries and bronchi. Nearer to the hilum the artery lies above, the vein below and the bronchi in between.

These findings are found to agree with the description given by Naréth, Weingartner, Grey and others,

Cervical Rib as an Accessory Aid to Diagnosis in Tuberculosis

Dr. A. H. N. WELIKALA.

The presence of a rudimentary rib in the cervical region is of great clinical importance if their radiographic appearances are appreciated. This abnormality goes under the name of a "Cervical rib." It may be associated with pressure upon the nerve trunks of the brachial plexus or the large vessels. If bilateral usually they are not of the same size. I am not here concerned on the symptoms produced by a cervical rib but on its significance in the diagnosis of doubtful T. B. lesions of the lungs. In examining a X-Ray film it is not possible to make a definite diagnosis of tuberculosis especially if there is an eosinophilic infiltration or a lung abscess, but if a careful study is made one could suspect T. B. disease of lungs if a cervical rib or an abnormal traverse process of the 7th cervical vertebra is seen. I am not putting therefore to you this theory as a 100% +ve signs but only to help you in a doubtful diagnosis. I have examined 25,000 skiagrammes in a year at the General Hospital, Colombo, in 1943, and came across 22 cases of cervical ribs of which 16 turned out to be T. B. +ve. I was confronted with lung abscess and fibrotic conditions of the lungs but was not able to make a definite diagnosis of T. B. disease from the skiagram itself, although later sputum reports were +ve to T. B. It is an observation made by me during 1943 and since then I have tried to get at any literature on the subject but failed. I thought it would be nothing but right to bring it before a learned audience of Radiologists to get more information on the subject. This observation should be of great importance to Medical Officers attached to T. B. Institutions.

. .

A REPORT OF

Seven Years Experience with 400 K. V. High Voltage X-ray Therapy in my Private Clinic

Dr. P. RAMA RAU, D.M.R. (Vienna).

347 cases of malignant disease and 144 cases of benign uterine haemorrhages have been treated with 400 K. V. during the past seven years, making a total of 491 cases. Out of these 324 received radiation to parts of abdomen, 139 to neck and 31 to other regions of the body.

Following observations were noted :—

1. No serious complaint during the treatment attributable to radiation ; nausea and vomiting exceptional ; diarrhoea in less than 3% of cases receiving radiation to abdomen.

2. Milder skin reactions than with identical doses at 200 K. V., permitting larger skin dose through any single portal or field.

3. This also means "single" or only "two portals" technique for any condition compared to multiple technique with 200 K. V.

No attempt is made to assess biological reactions. David Steel said in 1937 at the 5th International Congress of Radiology, Chicago, "that the period of bitter antagonism, indifference or mild interest is being replaced by enthusiasm"—this referring to 400 K. V. Therapy. I have no hesitation in affirming that justifiable enthusiasm.

A COMPARATIVE STUDY OF

The Biological Action on Tissues of Electro-Magnetic Radiations of Different Wave Lengths

Varying in quality from those produced at 60 K. V. to 1,000 K. V. and including gamma radiations of radium

H. MANJUNATH RAI, M.B., F.R.C.S. (E), D.M.R. (Lond.),
Professor of Radiology, Barnard Institute of Radiology, Madras.

1. A brief discussion of the Physics of electro-magnetic radiations as to what happens when they fall on matter.

2. A definition of correct dosage as opposed to the number of roentgens delivered to the tissues is given.

3. A study of the comparative clinical results obtained from roentgen therapy at a tension of 60 K. V. and those obtained by X-rays of radiation whose equivalent tension would vary from 600 K. V. to 1,600 K. V.

4. A comparative study of skin reactions obtained by irradiating the same patient at identical sites with a 200 K. V. and 1,000 K. V. apparatus.

5. CONCLUSIONS :—(a) Biologically equivalent doses produce equal clinical result—both immediate and late.

(b) The superiority of super voltage roentgen X-ray therapy over the conventional deep X-ray therapy has not only not been proved, but may be harmful if put into general use.

An Analysis of the Results of Treatment

By Röntgen Radiation for Inflammatory Conditions

In a Series of 1,305 Cases at the Barnard Institute of
Radiology during the Last Six Years.

DR. C. BHADRIAH, M.B., B.S., D.M.R.,

Madras.

1. The number and variety of inflammatory conditions treated with roentgen therapy is given with figures. This includes those already published by Dr. K. M. Rai, in the Indian Journal of Surgery, Vol. VI, No. 2, early in 1944.

2. A brief discussion of the mode of action of direct radiotherapy as opposed to indirect radiotherapy is given.

3. **Conclusion:** Direct radiotherapy, i.e. irradiating the primary focus directly, is a very useful method of therapy. With the accumulated experience of Radiologists all the world over in this form of therapy it can be safely predicted that even though Radiotherapy may be displaced by some form of Chemotherapy for malignant diseases, still the practice of Roentgen Therapy in inflammatory conditions is bound to play a very important part.

The Value of Röntgen Therapy in Ankylosing Spondylitis

An Analytical Study of 62 cases treated at the Barnard Institute of Radiology during the last four years, with demonstration of a typical case.

DR. YUSUF SIDDIQ, M.B., B.S., D.M.R.,

Madras.

1. The roentgen therapy for ankylosing spondylitis Levein described is inspired by the publication of Gibert-Scott in 1935, who summarised the result of 400 cases treated with roentgen irradiation and mentioned general body irradiation as the method of therapy. The rational mode of action and technique of treatment followed in the B.I.R. is discussed.

2. A short description about the pathology, symptomatology and roentgen diagnosis of this condition is also dealt with.

3. An analysis of 62 cases, treated by roentgen therapy in B.I.R. with special reference to age incidence, classification of cases according to radiographic finding, and progress of these cases under this treatment is discussed. The result of treatment as can be judged from the relief of pain, reduction in the paravertebral spasm, increased mobility of the spine and improvement in the general health, amply justifies recognition of this line of treatment as the method of therapy even in advanced stage of this disease. Orthopaedic treatment has to be combined with roentgen therapy to obtain the best result.

4. The case history of a typical advanced case of spondylitis is also presented.

An Analysis of the Result of Treatment of Leucoderma

At the Barnard Institute of Radiology during the last Six
Years With superficial X-ray and Ultra-violet Ray Therapy

DR. C. BADRIAH, M.B., B.S., D.M.R.E.,
Madras.

1. During the last six years a total of 198 cases of Leucoderma were treated in the Barnard Institute of Radiology and the results analysed.
2. The technique of treatment is indicated.
3. A brief discussion of the hypothesis on which the treatment is based is given.
4. **Conclusion :** This is a very useful form of therapy and the prevailing idea that there is no treatment for Leucoderma is not correct.

Outlook on Malignant Disease from a Surgeon's Standpoint

Rao Bahadur Capt. M. G. KINI, M.C., M.B., M.Ch. (Orth.), F.R.C.S.E., F.R.S.E.,
Surgeon & Superintendent, Stanley Hospital, Madras.

Radiologist and Indian Society for Control of Cancer

Dr. B. N. KHANNA, M.B., B.S., D.M.R.E.,
Bikaner.

LIST OF ADVERTISERS

CIBA (INDIA) LTD., BOMBAY	...	...	Outside of back cover page
ILFORD SELO (INDIA) LTD.	...	...	Inside of front cover page
KODAK LIMITED	...	...	Inside of back cover page
MALGHAM BROS, BOMBAY	...	...	page 42
MAY & BAKER, (INDIA) Ltd.	...		Front cover page
POWELLS LIMITED, BOMBAY	...	...	page 43
THE ANTISEPTIC, MADRAS	...	...	„ 42
W. T. SUREN & CO., MADRAS	...	...	„ 44

Members of the Indian Radiological Association

IN ALPHABETICAL ORDER

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
1. Ananda Rao, Dr. P., Radiologist, Govt. H. Q. Hospital, Guntur	18th Aug. 1901	L.M.P. (Mad.) 1928 Trained in X-ray in B.I.R. in 1943-44.
2. Adhikari, Dr. R. C., 32, Creek Row, Calcutta		M.B., M.R.C.P., T.D.D.
3. Almeida, Dr. Milanius de, 35, Skelton Road, Havelock Town, Colombo, Ceylon		M.D., M.R.C.S., L.R.C.P., T.D.D.
4. Aggarwal, Dr. Diwan Chand, 43, Isbet Road, Lahore		M.B., B.S.
5. Athle, Dr. L. H., 162, Janaki Nivas, Vincent Road, Dadar, Bombay		M.B., B.S., D.M.R., M.A.C.R.
✓ 6. Arunachalam, Dr. P., 10, Lodikhan Street, T. Nagar, <u>Madras</u>		M.D., M.R.C.P., D.M.R., T.D.D.
7. Bagh, Dr. M. L., Bagh Clinic, Ajmer		
8. Banerjee, Dr. R. P., P-6-3, Chittaranjan Avenue, Calcutta		M.B., D.M.R.E.
9. Basu, Dr. Satyabrata, Chemical Assistant, X-Ray Dept., Medical College, Bengal (1942-1945), Radiologist, Port Engineering Hospital, Calcutta, 23, Baje Sahib- pur Road, Howrah	1919	M.B. (Cal.), 1942.
✓ 10. Bhadriah, Dr. C., Radiologist, Barnard Institute of Radiology, Madras, 11, Sait Colony 2nd St., Egmore, <u>Madras</u>	16th Oct. 1915	M.B.B.S., 1938. D.M.R., 1945.
11. Bhatt, Dr. Hari Nandan, Rai Bahadur, Radiologist in-charge, Radiology Department Thomason Hospital, Agra	1st July 1902	M.B., B.S., 1927 F.R.C.S., 1938 D.M.R. & E., 1939 P.M.S.
12. Bhattacharjee, Major R., 4/1, Nakuleswar Bhattacharjee Lane, Kalighat, Calcutta		M.B.
13. Benjamin, Dr. G. I., Govt. Hospital, Vizagapatam		L.M.S.S.A.
✓ 14. Chamu Nair, Dr. (Mrs.), Hospital for Women and Children, Egmore, <u>Madras</u>		L.M.P.

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
15. Chatterjee, Dr. P., 33, Beadon Street, Calcutta		M.B., F.R.C.S.
16. Chatterji, Dr. S. N., 86, Ballygunge Place, Calcutta		L.M.F., M.D., L.M.
17. Colaco, Dr. J. M., Father Mullers Charitable Institution, Kankady P.O.		M.B., B.S. (Bom.).
18. Coyaji, Dr. E. H., 10, Main Street, Ponna		M.B., B.S.
✓ 19. Damoder Das, Dr. D., 436, Mint Street, Sowcarpet, <u>Madras</u>		M.B., B.S., T.D.D.
✓ 20. Daniel, Dr. Arthur, 14, Thacker Street, Vepery, <u>Madras</u>		M.B., B.S., D.M.R. (Mad.)
✓ 21. Dasanna, Dr. M. N., 62, Gengu Reddy Street, Egmore, <u>Madras</u>		M.B., B.S. D.M.R. (Mad.)
22. Deboo, Dr. Sorab Navroji, Hony. Radiologist G. T. Hospital, Bombay, Consulting Hony. Radiologist to Bai Jerbai Wadia Hospital for Childran, Parel, Bombay, Late Hon. Radiologist, St. George Hospital, Bombay, Lecture in Radiology for D.M.R. at the G.T. Hospital Institute of Radiology, Bom- bay and the Red Cross Polish Hospital, Bom- bay; Radiologist, Coronation Building, Gunbow Street, Fort, Bombay		M.B., B.S., 1919 M.R.C.S. (Eng.), 1920 L.R.C.P., 1920
23. Deodhar, Dr. S. V., Hony. Radiologist, Civil Hospital, Nasik, Poono Ananth Vidyarthi Griha, Panchavati, Nasik	Jan. 5th, 1899	L.C.P. & S. (Bom.), 1926 M.D. (Vienna), 1931
24. Devaraj, Dr. A. C., Radiologist, Krishnarajendra Hospital, Mysore		B.A., L.M. & S., L.R.C.P. & S., L.R.F.P. & S., D.M.R.E.
✓ 25. Doraiswamy, Dr. K. R., Edward Elliot's Road, Mylapore, <u>Madras</u>		L.M.P.
✓ 26. D'Silva, Dr. (Mrs.) A., Barnard Institute of Radiology, <u>Madras</u>		
27. Galstaun, Dr. G., 34, Chowringhee, Calcutta		M.A., M.R.C.P., F.F.R., D.M.R.E.
28. Ganesan, Dr. V. S., Radiologist, Govt. H. Q. Hospital, Salem		L.M.P.

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
29 Ghose, Dr. Gobardhan, (Has been working in Radiology and Electro-therapy since 1932. Worked as a Radiologist at the B.M.H. and I.M.H. Allahabad(1942-44). For over ten years has been in charge of a well equipped Electro-Medical Clinic). 8, Mint Road, Allahabad, U.P.	Jan. 29, 1896	M.B., B.S., (Allahabads), 1920 D.T.M. (Bengal), 1924
30 Giri Rao, Dr. P. Sesha	Aug. 24, 1907	L.M.P., 1929 L.P.H., 1932 L.T.M., 1932
31 Goulatia, Capt. R. C., Radiologist, The Punjab X-ray Clinic, Nisbet Road, Lahore		Post Graduate Course in Tuberculosis, Madanapalle and Madras; Radiological Training in Bangalore
32. Guha, Dr. Prafulla Kumar, Radiologist, Mayo Hospital, Calcutta; 70, Upper Circular Road, Calcutta.	June 21, 1902	L.M.F. (Bengal), 1928 (Training in Radiology and Electro-therapy in Chittaranjan Seva-Sadan, Calcutta in 1902)
✓ 33 Guru Das, Dr. M., 41, Varada Muthiappa Street, George Town, <u>Madras</u>		M.B., B.S., D.M.R. (Student).
34 Hussain, Dr. M. Anwar, Assistant Radiologist, Osmania Hospital, Hyderabad, Dn.	March 20, 1908	L.M. & S. (Hyderabad) 1931, D.M.R. (Madras) 16-4-1942.
35 Iyengar, Dr. R. S., Asst. Radiologist, Krishnarajendra Hospital, Mysore		L.M.P.
36 Jabbar, S. A., Supdt., Osmania Hospital, Hyderabad Dn. from 1942 and Radiologist from 1928—1942 (14 years)	June 11, 1898	M.B., B.S., (Bom.), 1924 D.M.R.E. (Cantab.), 1928
37 Jacob, Dr. A. O., Superintendent, Government Hospital, Trivandrum		M.B., B.S., D.M.R.E.
38 Jayaram, Dr. B., Medical Officer, P. K. Hospital, Mysore		M.B., B.S., L.C.P. & S., T.D.D.
39 Jayaram, Dr. V. E., Bowring Civil Hospital, Bangalore		L.M.P.
40 Joseph, Dr. M. P., Government Hospital, Ernakulam		B.A., M.B., B.S., D.M.R. (Mad.).

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
41 Joshi, Dr. Anant Govind, Wadia Civil Hospital, Sholapur (Bombay)		L.C.P.S.
42 Joshi, Dr. M. D., J. P., Bombay Nursing Home, Dr. Bhajkar Street, Sandhurst Road, Bombay 4		M.B., B.S., (Bom.), 1920 D.M.R.E. (Cam.), 1923 F.C.P.S. (Bom.), 1936
43 Joshi, Dr. Madhav Purushotham, Hony. Anaesthetist in the Seth Tarachand Ramnath Charitable Ayurvedic Hospital. and Hony. Radiologist in the same Hospital since 1939. 912, Sadashiv Peth, Poona 2	April 14, 1897	L.C.P.S., (Bom.), 1921
44 Kalamegham, Dr. R., Nursing Home, Cantonment, Trichinopoly		B.A., M.B., B.S.
45 Kamaraju, Dr. K., Wellesley Sanatorium Jail, Bellary Cantt.	April 7, 1900	L.M.P. (Mad.), Training B.I.R.. Mad.
46 Kantayya, Dr. Noble Ganugapathi, Vice President, Tinnevely District Medical Assn., 1945, Independent Medical Practitioner Regd. No. 6027 (Madras); Private Nursing Home & X-ray Institute, Palamcottah	Jan. 14, 1905	B.A. (Mad.), 1926 M.B., B.S. (Mad.) 1931
47 Khanna, Dr. Bishun Narain, Asst. Medical Radiologist, K.E.M. Hospital, Bombay 1937—38, Resident House Surgeon, 1939, Clinical Asst. in Radiology (1941-42), K.E.M. Hospital Lucknow, Radiologist, X-ray & Radium Institute, Bikaner (1942-45); Old City, Etawah, U.P.		M.B., B.S., 1937 D.M.R.E., 1941
48 Khanolkar, Dr. V. R., Director of Laboratories, Tata Memorial Hospital, Parel, Bombay		B.Sc., M.D.
49 ✓ Kini, Rao Bahadur Capt. M. G., Surgeon, & Superintendent, Stanley Hospital, <u>Madras</u>		M.C., M.Ch., F.R.C.S.
50 Kohle, Dr. (Mrs.) R., Clarke Bunder, Bombay Port Trust, Mazogon, Bombay		D.M.R.E.
51 Krishnamoorthy, Mr. V., Physicist, Barnard Institute of Radiology, General Hospital, Madras		B.Sc. (Mad.), M.Sc., (Benares), A.M.I.S.E.
52 Krishnamoorthy, Dr. Y. N., Radiologist, Victoria Hospital, Bangalore	Oct. 20, 1892	L.M. & S. (Mad.), 1918 L.R.C.P.&S. (Edn.), '29 L.F.P.G.&S. (Glas.) '29 D.R. (Edin.), 1930

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
✓ 53 Krishna Rau, Dr. U. 323/24, Thambu Chetty St., G. T. <u>Madras</u>	Oct. 10, 1900	M.B., B.S. (Mad.), 1924
54 Kronenberger, Dr. P. H., Hony. Radiologist, St. George's Hospital, Bombay, Founder Member of the "Bombay Radiological Society" 8, Wodehouse Road, Bombay	Dec. 14, 1903	M.D. (Bom.), 1927 M.D. (Cagl.), 1935
55 Kuppuswamy, Dr. (Mrs.) A. S., Govt. H. Q. Hospital, Trichinopoly		L.M.P., L.T.M.
56 Lahiri, Dr. Atul Chandra, X-ray Institute, Grand Trunk Road, Asansol, Bengal		M.B.
57 Lahiri, Dr. S., State Surgeon and Radiologist, Benares State, Member, I. M. Association, D-47/178 Luxa Road, Benares, U. P.	Sep. 8, 1895	M.B. (Cal.), 1921 X-ray Certificate from Dehra Dun, 1929.
58 Lakshmana Rao, Dr. R., Imperial Bank Road, Coimbatore		L.M.P., Radiologist trained in B.I.R.
✓ [59 Lakshmanaswamy Mudaliar, Sir A., Kensington, Poonamalle High Road, Kilpauk, <u>Madras</u>]		M.D., F.R.C.O.G., F.A.C.S.
60 Lalvani, Dr. Partabrai, Pritamdas, Radiologist at J. J. Hospital, Bombay, (1925-26), Radiologist, Civil Hospital, Karachi (1926-38). Now Director, The Sind Electro X-ray Institute and Clinical Laboratory, Karachi; Said Manzil, Bunder Road, Karachi.	Mar. 9, 1898	L.C.P.S. (Bom.), 1919
61 Mahadevan, Dr. M. N., The Cash Pharmacy, 2, St. Mark's Road, Bangalore	Nov. 28, 1906	M.B., B.S. (Mad.), 1930 M.R.C.P. (Edin.), 1938 D.T.M. (Lond.), 1937 F.R.F.P.S. (Glas.), '38
62 Maitra, Dr. Jatindra Mohan, Honorary Pathologist and Radiologist, Sirdar Hospital (Provincialised), Rajshahi, Hony. Pathologist and Radiologist, Raja P. N. Roy Hospital, Ghoramara (Rajshahi), Bengal	Nov. 1, 1904	M.B. (Cal.), 1930
63 Mani, Dr. Mahendra, Medical Department, Kodak Ltd., Bombay		M.B., B.S., D.M.R.
64 Mario Edgardo Soares Da Veiga, Dr., Director, X-ray Institute, Nova Goa, Portuguese India, Prof. of Radiology, Medical College of Goa, Nova Goa.	Sep. 4, 1904	M.D., 1930 D.M.R.E. (Lisbon), '32 (Paris), 1934

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
65 Markan, Dr. Ramesh Chandra, Resident Medical Officer and Radiologist, Civil Hospital, Ujjain	Mar. 21, 1907	M.B., B.S. (Bom.), 1931 D.M.R. (Mad.), 1945
66 Mathew, Dr. Maniatu Kochoomen, Doctor on the Staff of Green Hospital, Manipay since 1927 and Assistant Director of the Hospital; Radiologist, American Ceylon Mission Green Hospital, Manipay, Ceylon	April. 23, 1897	M.B., B.S. (Mad.) 1925. Post Graduate in Radiology (Vienna), 1935.
67 Mathias, Capt. P. F., 7, Thube Park, Poona		I.M.S., M.B., B.S.
68 Mathur, Dr. Krishna Behari, Radiologist, Provincial X-ray Institute, Gologanj, Lucknow, opposite Christian College, Lucknow, U. P.	Nov. 2, 1910	M.B., B.S. (Lucknow), 1934, Z.M.R.E. (Vienna), 1938.
69 Mathur, Dr. Krishna Saran, In-charge Cardiology Dept., Agra Medical College, Agra.		M.B., B.S., M.R.C.P.
70 Mehta, Dr. A. D., Radiologist, State Hospital, Bhavnagar, Kathiawar		M.B., B.S.
71 Mitra, Dr. Subodh, 3, Chowringhee Terrace, Elgin Road Post Office, Calcutta		M.D., F.R.C.S., F.R.C.O.G., F.N.I.
72 Mody, Dr. K. P., Victory Court, Queen's Road, Bombay.		B.A., L.M. & S., F.C.P.S. (Bom.), D.M.R. (Eng.)
73 Modi, Dr. R. K., Hony. Radiologist, Civil Hospital, Ahmedabad, Hony. Lecturer in Radiology, B. J. Medical School, Ahmedabad, Member, Indian Medical Association, X-ray and Cancer Specialist, X-ray and Cancer Institute, Near Ellis Bridge, Ahmedabad	Aug. 26, 1906	M.B., B.S. (Bom.) 1932. D.M.R. (Lon.), 1936.
74 Mukherje, Dr. Sambhu Nath, 60, Maha Nirvan Road, Calcutta		M.B., D.M.R.E.
75 Mukherjee, Capt. M., 4, Cooper Street, Calcutta		M.D., D.M.R.E.
76 Mukherjee, Dr. Tarapada, Formerly Junior Radiologist, Mayo Hospital, Calcutta and Radiologist, Cooch Behar State, At present Medical Officer-in-charge, Dr. B.N. Bose Hospital, Barrackpore	Dec. 12, 1911	M.B. (Cal.), 1937, Post-graduate in Radiology (Cal.), 1930.
77 Manchanda, Dr. R. L., Queen's Road, Amritsar		M.B.I., M.S. (Punjab).

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualification
78 Narayana Menon, Rao Bahadur Dr. A., "Menon Clinic" and X-ray Laboratory, 7, Good Shed Street, Madura.		M.B., B.S. (Mad.), 1920
79 Narayanan, Dr. P. K., C/o. Subramanyam Hospital and X-ray Institute, Karaikudi, Ramnad Dt,		M.B., B.S., T.D.D.
80 Narayanan Kutty Menon, Dr. A., Radiologist, Govt. Stanley Hospital, Royapuram, 7, Casa Major Road, Egmore, Madras.		M.B., B.S., D.M.R.
81 Narayanaswami, Dr. M. K., The X-ray Institute, Motilal Street, Kumbakonam.		
82 Natarajan, Dr. K., Radiologist, Raja Mirasdar Hospital, Tanjore.	Aug. 1, 1893	L.M.P. (Mad.), 1916, Training in Radiology, B.I.R., Madras, 1936-37 L.R.C.P. (Edin.) 1939,
83 Nasiruddin, Dr. M., Radiologist, Osmania Hospital and Lecturer in Radiology, Osmania Medical College, Hyderabad, Deccan.	Sept. 26, 1908	L.R.C.S. (Edin.), 1937, L.R.F.P. & S., (Glas.), 1937, L.M. (Dub.), 1936, D.M.R. (Lond.) 1939.
84 Noronha, Dr. M-X-de., 16/30, Civil Lines, Garruth, Cawnpore, U. P.		D.M.C.C., L.D.S., K.I.H.
85 Narayana Rao, Dr. A., Radiologist, Nursing Home, Gudivada, Kistna Dt.		M.B., B.S.,
86 Padki, Dr. Raghunatha Rao Srinivasa Rao, Radiologist, E.I. Rly. Hospital, Allahabad.	Mar. 30, 1902	M.B., B.S. (Bom.), 1926, F.R.F.P.S. (Glas.), 1939, D.M.R.E. (Cam.), 1938.
87 Pal, Dr. Saket Nibas, Chief Medical Officer, Yagoda Satsanga Medical Department, Club Road, Ranchi, Bihar.	Feb. 1912	M.B. (Cal.), 1936.
✓ 88 Pandalai, Lt.-Col., K. G., "Binfield," Poonamallee High Road, Kilpauk, Madras.		F.R.C.S. (Eng.)
✓ 89 Pandit, Dr. C. G., Director, King Institute, Guindy, Saidapet P.O., Madras.		M.B., B.S., Ph. D. (Lon.)
90 Patil, Dr. A. J., Kolhapur.		M.B., B.S., D.M.R.E., L.R.F.P.S.

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
91 ✓ Prabhu, Dr. M. B., Prof. of Clinical Obstetrics, Govt. Hospital for Women and Children, Egmore, Madras, (4, Gengu Reddy Road, Egmore, <u>Madras</u>).		M.D., M.R.C.P., M.M.
92 Quintus Peiris, Dr. James John, Radio-therapeutist and Asst. Radiologist, General Hospital, Colombo.		L.M.S. (Ceyl.), 1937, Post-graduate training in Radiology.
93 Raghavan, Dr. P. A. S., Teppakulam Post, Trichinopoly.		Z.M.R.E. (Vienna).
94 Rahman, Dr. M. J., Radiologist, X-Ray Institute, Bhawalpur.		M.B., B.S., D.M.R.
95 ✓ Rai, Dr. K. Manjunath, Professor of Radiology, Madras Medical Col- lege, and Madras Barnard Institute of Radio- logy, General Hospital, <u>Madras</u> .	July, 1900	M.B., B.S. (Mad.), 1926, F.R.C.S. (Edin.), '37, D.M.R. (Lon.), 1938
96 Ramachandran, Dr. A. K., Dr. Krishnan's Hospital, Sultanpet, Palghat, S. Malabar.		L.M. & S., D.M.R.
97 Ramadas, Dr., Chittoor Kannaveri Gardens. Guntur	Dec. 12th 1914	D.M. & S. (Mad.), 1939- D.M.R. (Mad.), 1941.
98 Ramanujachari, Dr. C., Rajan Clinic. Trichinopoly.	May. 28. 1913	B.A., M.B., B.S., 1940, D.M.R. (Mad.), 1942.
99 Rama Rau, Dr. P., In radiological practice since 1925 ; Member, Austrian Röntgen Society, Vienna, 1937 ; Member, German Röntgen Society, Berlin 1938 ; Director, Madras Radiological Institute, 155-157. Poonamallee High Road, Kilpauk, Madras.	23, Sep. 1899	L.M.P. (Madras) 1920, D.M.R. (Vienna). 1931.
100 Ramaswamy Aiyar, Dr. C. S., The X-ray Institute, Rajah St., Coimbatore.		L.M. & S.
101 Ranganathan, Dr. V. K., Trichy X-rays, Ltd., Trichinopoly.		M.B., B.S., D.M.R (Mad.)
102 Razdan, Dr. J. L., 8, J. A. Hospital, Gwalior		M.B., B.S., L.R.C.P.&S. D.T.M. & H., D.M.R.E.
103 Rege, Dr. Madhusudan, Balvantrao, Asst. Radiologist, St. George's Hospital, Fort, Bombay 1.	Dec. 26, 1917	M.B., B.S. (Bom.), 1941 D.M.R. (Bom.), 1945. B.M.S., 2 years Post- graduate in Pathology.
104 Sankaran, Dr. K. P., Radiologist, Govt. H. Q. Hospital, Calicut.		

NAME AND ADDRESS		Date of Birth	Medical & Specialised Qualifications
105	Savur, Dr. S.R., X-ray and electro therapy, 162 'Janaki Nivas' Vincent Rd., Dadar, Bombay		M.B., B.S., D.M.R.
106	Saxena, Dr. Onkar Nath, Lecturer in Radiology, Medical College, Agra, U.P.		M.B., B.S., D.M.R.E.
107	Seudder, Dr. (Miss.) Ida B., Mission Hospital, Vellore		M.D., M.R.C.S., (Eng.), D.M.R.E. (Cantab).
108	Sethna, Dr. Rustamji Fardoonji, Junior Hony.-Radiologist, Sir J. J. Hospital, Bombay, Radiologist and Electrotherapeutist, 3rd Floor. Navsari Building, Hornby Road, Bombay	May 24, 1903	M.B., B.S. (Bom.), 1927 D.M.R.E. (Cam.), 1930.
109	Shiv Jee Dhar, Dr., Was House Surgeon from 1908 to 1918 & the Medical Officer X-ray Dept., Govt. Hospital, from 1918 to 1940, at present running his own X-ray clinic, 1st Bridge, Sri Nagar, Kashmir		L.M. & S. 1908. Diploma from X-ray Institute, Dehra Dun, 1918.
110	Sen, Dr. Jayadeb Prasad, Radiologist and Asst. Medical Officer, Main Hospital, Raigarh, E. S. A., Bilaspore Dt.		L.M.F.
111	Sen, Dr. Satis Chandra, X-ray Specialist, R.A.F. Indian Hospital, Baghdad, 1923-25, Chemical Asst., Electrical Dept. Bertholmew's Hospital, London, 1926. Hon. Radiologist. S. J. T. B. Hospital, Delhi, since 1935	Sep. 1, 1895	B.Sc. (Cal.), 1915, M.B. (Cal.), 1920, D.M.R.E. (Cam.), 1926.
112	Shankar, Dr. Bhavani, Radiologist, Lady Willingdon Hospital, Jaipur, since 1926, (was enrolled at the Royal Cancer Hospital, London, in 1939, but could not proceed owing to out-break of war). Radiologist, Lady Willingdon Hospital, Jaipur, City, Rajputana	Feb. 15, 1899	M.B., B.S., 1923.
113	Shankunny Kallat, Dr., Pollachi		L.M.P.
114	Sharma, Dr. R.N., X-ray Clinic, Lahargali, Agra	Nov. 14, 1919	D.T.M.
115	Sharma, Dr. Triloki Nath, X-ray Dept. Irwin Hospital, New Delhi, Doctor's Lane, New Delhi		L.S.M.F., 1942, D.M.R., 1944.
116	Shetty, Dr. A. Dayanand, Barnard Institute of Radiology, General Hospital, Madras		M.B., B.S., D.M.R. (Student).
117	Shetty, Dr. K. Balappa, Radiologist to the Govt. Wenlock Hospital and Lady Goshen Hospital, Attavar Road, Mangalore	June 15, 1912	L.M.P., 1937, D.M.R. (Mad.), 1940.
118	Shorten, Lt.-Col. J. A., 34. Chowringhee, Calcutta		B.A., M.R.C.P., F.F.R., I.M.S. (Retd.)
119	Siddique, Dr. Y., Barnard Institute of Radiology, General Hospital, Madras.		M.B., B.S., D.M.R.
120	Singh, Dr. Fauja, House Surgeon, Hospital, Lahore, 1927-28, Lyallpur Nursing Home, X-ray & Electro-therapeutic Institute, Lyallpur	May 28, 1903	M.B., B.S. (Punjab), 1926.

NAME AND ADDRESS	Date of Birth	Medical & Specialised Qualifications
121 Sivanandam, Dr. T. V., Govt. H. Q. Hospital, Coimbatore.		M.B., B.S.
✓ 122 Sivaramakrishnan, Dr. S., 60, Luz Church Road, Mylapore, <u>Madras</u>		L.M.P.
123 Subramaniam, Dr. S., X-ray Institute, Karaikudi		M.B., B.S.
✓ 124 Sundaram, Dr. T. K., Barnard Institute of Radiology, General Hospital, <u>Madras</u>		M.B., B.S. Zeugnis (Univ. of Vienna).
125 Sur, Dr. Asuram, 50, Colootola Street, Calcutta or 62, Shakhari Bazaar, Dacca.		M.B.
126 Thomas, Dr. Horace Stuart, Surgical Assistant, Royal Melbourne Hospital (1942-'43), Willis F. Pierce Memorial Hospital (1925-'41), Hospital for Women and Children (1943-'), Madura	Feb. 19, 1900	M.B., B.S. (Melb.), 1924, D.T.M. (Cal.), 1926, M.R.C.S. (Eng.), 1928, L.R.C.P. (Lon.), 1928.
127 Tankaria, Dr. Ardeshir, N., Chief Medical Officer, Calico Jubilee and Labour Union Hospital, Mirjapur Road. Ahmedabad	1887	L.M. & S. (Bom.), 1913.
✓ 128 Vasudevan, Dr. A., 21, Orme's Road, Kilpauk, <u>Madras</u> .		M.B., B.S.
129 Vedadri, Dr. V. D., Radiologist, Sub-Asst., Mysore Iron and Steel Works Hospital, Bhadravati.	May 5, 1902	L.M.P., 1925, D.M.R., 1941.
130 Ved Prakash, Dr., Resident Radiologist, K.E.M. Hospital, 1931- '33 (Bombay), X-ray, Electro Medical and Skin Clinic, 1. Barakhamba Road, New Delhi	Mar. 15, 1906	M.B., B.S. (Bom.), 1930, D.M.R.E. (Cam.) 1937. Fellow of the St. John's Hospital Dermatological Society, 1937
131 Veeraswamy, Dr. L., Radiologist, Government Hospital, Bellary		L.I.M., Training in B.I.R., Madras.
132 Venkateswarulu, Dr. S., Barnard Institute of Radiology, General Hospital, Madras		B.A., M.B., B.S., L.O., D.M.R.
133 Verma, Dr. M. S., The Benares Clinic, Bulanala, Benares, U. P.		
134 Viswanatha Menon, Dr. C. P., " Binfield " Poonamallee High Road, Kilpauk, Madras		M.D., F.R.C.S. (Eng.)
135 Viswanadha Rao, Dr., Kalasipudi Chavalavasi Street, Vizagapatam.		L.M. & S.
136 Weilikala, Dr. Alexander, Asst. Radiologist, General Hospital, Colombo, Hugh Noel, 80/3, 4th Lane, Colpetty, Colombo, Ceylon.	Feb. 7, 1916	L.M. & S., 1937.
137 Kulkarni, Rao Bahadur Dr. Narayan Hari, Radiologist, Sassoon Hospital, Poona, 1924 to 1942, Pratibha Building, Deccan Gymkhana, Poona 4.	Mar. 28, 1890	M.C.P. & S. (Bom.), 1917, D.M.R.E. (Cam.), 1924.

MALGHAM BROS.

26, Old Custom House Road,
Fort, BOMBAY

INVITE INQUIRIES

for

HANOVIA LIGHT EQUIPMENT
FISCHER SHORTWAVE APPARATUS
FISCHER DIAGNOSTIK X-RAY PLANTS
SCHALL PANTOSTALS.

READ FOR 40 YEARS BY THE MEDICAL PROFESSION

THE ANTISEPTIC is one of the oldest and foremost medical journals in India. Month by month it publishes important articles on various aspects of medicine and surgery from the pens of leading authorities. The best foreign and Indian medical journals have spoken highly of it. To the practitioner and to the student the ANTISEPTIC furnishes invaluable and up-to-date scientific information.

The rates of subscription are kept deliberately low so that the journal can reach as large a number of readers as possible.

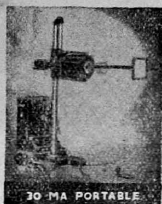
Subscription: Rs. 7-8 a year.
Foreign 15 s. a year.
Single Copy Re. 1.

The Editors of the Antiseptic
gladly welcome contributions
from Doctors.

The Antiseptic
323-24, THAMBU CHETTY STREET,
G. T., MADRAS



Westinghouse



30 MA PORTABLE



BACTERICIDAL LAMP



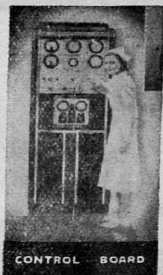
SHORT-WAVE UNIT



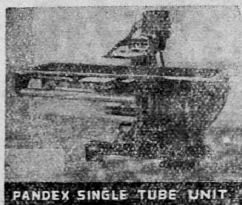
SCREENING FACILITY
30 MA PORTABLE



FLUORADEX TWO TUBE UNIT



CONTROL BOARD



PANDEX SINGLE TUBE UNIT



VERTICAL FLUOROSCOPE



DEEP THERAPY UNIT

Sole Distributors

INDIA, BURMA & CEYLON.

POWELLS LIMITED.

LAMINGTON ROAD, BOMBAY, 4.

TRADE



MARK

T.C.F.

- ★ Pharmaceuticals
- ★ Biologicals
- ★ Hormones
- ★ Vitamins

**TEDDINGTON CHEMICAL
FACTORY LTD.**

Sole Distributors:

W. T. SURÉN & CO., P. O. BOX 229, BOMBAY

BRANCHES:

Calcutta : 86 Mission Row Extension, P. O. Box 672.
Medras : 12 Senkurama Chetty St., George Town.

Karachi : 54 Forbes Building, Bander Road.
Lahore : Nehru Park, Beadon Road.



KODAK X-RAY FILM

WITH BLUE-TINTED BASE FOR
EASIER VISION

SUPER-SPEED

(Clear)

TROPICAL SAFETY FILMS

SPECIALLY HARDENED - GIVE PERFECT RESULTS

With

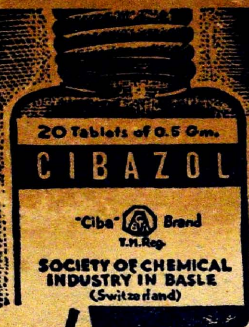
Kodak X-Ray

Developing and Fixing Powders



Every endeavour is made to assure that film reaches you in the freshest condition possible; and every aid is afforded to individual radiographers by the Kodak Service — which is backed by a world-wide experience as old as radiography itself.

KODAK LIMITED. (Incorporated in England)
BOMBAY - CALCUTTA - LAHORE - MADRAS



Destined

FOR THE MEDICAL HALL OF FAME CIBAZOL

(2-SULFANILYL-AMINOTHIAZOLE)

For specific treatment of:

PNEUMONIA, GONORRHOEA, BACILLARY DYSENTERY,
PLAGUE, SMALL-POX AND VARIOUS STREPTOCOCCAL
AND STAPHYLOCOCCAL INFECTIONS AND OTHER
ALLIED INDICATIONS.

*Available in Tablets for oral treatment, Ampoules for parenteral
administration and Powder and Ointment for local application.*

Sole Importers:



CIBA (INDIA) LIMITED,

PHARMACEUTICAL DEPARTMENT,

P. O. Box 479 - BOMBAY.

643