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KOMBUR SESA IYENGAR KUPPUSWAMY IYENGAR  
IN MEMORIAM

BY

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## KOMBUR SESHA IYENGAR KUPPUSWAMY IYENGAR IN MEMORIAM

THE sudden death due to pneumonia of Kombur Sesha Iyengar Kuppuswami Iyengar—better known as K. S. K. Iyengar—at Mysore, on 23rd June 1944, marks the loss of one of our distinguished Fellows, and one who was well known in mathematical circles in India. The loss is all the more poignant because his death at the age of 45 is so premature.

Born on 29th August 1899, K. S. K. Iyengar finished his early education in the Government High School, and the Central College, Bangalore, and later went to Madras and joined the Presidency College to study for the Honours Degree Examination. He passed the Honours Examination with distinction in 1920, and noticing his pronounced ability in Mathematics his parents decided to send him to Cambridge to study for the Mathematical Tripos.

But for a short spell of a few months at London where he came in contact with Karl Pearson, K. S. K. Iyengar spent the good part of his stay of nearly five years in Europe in Cambridge itself. He took courses in several branches of pure and applied mathematics but his favourite subject was Analysis, and contact with Littlewood had a profound influence on him. He too was one of the many students who went to Cambridge, and came under the spell of the Hardy-Littlewood tradition. The pioneering work of W. H. Young on sets of points made a great appeal to him, and was responsible for the keen interest he always evinced in point set topology. Continental mathematical work of the time on the theory of functions of a complex variable, especially the work of the German school attracted him so much that he once made a trip to Germany and met Koebe who had by then perfected his uniformisation theory.

After taking a star wranglership at Cambridge he returned to India in 1925, and was soon appointed to the position of the Head of the Department of Mathematics in the University of Mysore, at the Central College, Bangalore, in January 1926. It was largely due to his high standards, energy, and vision that the department was adequately equipped with library and other facilities to keep pace with modern developments. He was largely instrumental in introducing rigour in mathematical teaching in the University, in making provision for teaching several advanced branches, specially theory of functions of a complex variable and real variables and

theories of integration, and in introducing methods of mathematical physics as a compulsory subject for the Honours Courses. In 1930 he was elected a Fellow of the Cambridge Philosophical Society from Trinity Hall. He was also a member of the London, American and Indian Mathematical Societies. He was elected a Fellow of the Academy in 1934. He served on the Boards of Studies, Boards of Examiners, Faculties and Academic Council of his University and several others in India. He was also in charge of the teaching of German in the Science Faculty.

It was only in 1938 that K. S. K. Iyengar started publishing his papers regularly and the bibliography of his published papers contains 20 titles and is appended at the end of this note. The important of these can be classified as follows:—four papers on sequences and series, four on summability and Tauberian theorems, three on normal orthogonal sets, two on derivatives of a function, one on integral functions, three on a geometrical problem, and one on the mathematical aspect of the Bhabha-Heitler cascade theory of cosmic rays. One of the papers on derivatives which consists of generalisations of the theorems of Khintchine and Mazurkiewicz were noticed by Saks and published in the *Proceedings of the Warsaw Scientific Society*. The papers dealing with summability are characteristic of his zeal for generalisation and contain many well-known theorems of Hardy and Littlewood as particular cases. The three connected papers on linear transformations of bounded sequences offer a penetrating study of this topic. I shall however give it as my personal opinion that K. S. K.'s paper dealing with the exact solution of the equations of the general cascade theory is his best. This paper, which arose out of discussions with Bhabha on the subject, consists of rigorous proofs for the existence of solutions of a type of differential equations, and the sharp and manifold analytical tools employed serve to show that their author is an analyst of high calibre.

He married in 1926, but had no children. A tall and arresting personality, a good sportsman, a charming conversationalist, full of foibles and lovable just because of them, K. S. K. Iyengar made a deep impression on all who came in contact with him. He was recently getting himself interested in point set topology which he had been studying deeply, but deeper still was his interest in Indian Philosophy, the Bhagavad Gita, Buddhism, religious mysticism, and systems of Yoga. His sudden death removes from our midst a good teacher, and a great friend of all who teach or learn mathematics.

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B. S. MADHAVA RAO,



# CONTENTS

## SECTION A—VOL. XX

No. 1—July 1944

		PAGE
1257	A Theory of Biogenesis of Lichen Depsides and Depsidones . . . . . T. R. SESHADRI	1
1258	The Magnetic Behaviour of a Tektite . . . . . A. SIGAMONY	15
1259	Interferometric Studies of Light Scattering in Binary Liquid Mixtures—Part II . . . . . K. SUNANDA BAI	18
1260	The Specific Heat of Metals Crystallising in the Cubic System . . . . . BISHESHWAR DAYAL	24
1261	The Localisation Theory in Set-Topology . . . . . R. VAIDYANATHASWAMY	51
1262	Some Applications of Ramanujan's Trigonometrical Sum $C_m(n)$ . . . . . K. G. RAMANATHAN	62

No. 2—August 1944

1263	The Raman Spectrum of Hexamethylene-Tetramine . . . . . K. SUNANDA BAI	71
1264	The Specific Heats of the Alkali Halides . . . . . BISHESHWAR DAYAL	77
1265	The Specific Heat of Metallic Silicon . . . . . BISHESHWAR DAYAL	87
1266	The Thermal Expansion of Diamond . . . . . BISHAMBHAR DAYAL SAKSENA	92
1267	A New Derivation of the Darwin-Prins Formula of X-Ray Reflection . . . . . G. N. RAMACHANDRAN	100
1268	Synthetical Experiments in the Group of Sympathomimetics, Part IV . . . . . S. RAJAGOPALAN	107

No. 3—September 1944

1269	Molecular Aggregation in Optical Glasses as Revealed by Light-Scattering . . . . . R. S. KRISHNAN AND P. VENKATA RAO	109
1270	Polarisation of Raman Scattering and of Fluorescence in Diamond . . . . . ANNA MANI	117
1271	Normal Oscillations of the $T_d$ Class Diamond Structure . . . . . S. BHAGAVANTAM	122
1272	The Hydrogen Bond and Diamagnetism . . . . . S. V. ANANTAKRISHNAN AND P. S. VARADACHARI	128

			PAGE	
	123	Lattice Spectrum, Specific Heat, and Thermal Expansion of Lithium and Sodium Fluorides . . . . .	BISHESHWAR DAYAL 138	17 My
	124	Theory of the Thermal Expansion of the Alkali Halides . . . . .	BISHESHWAR DAYAL 145	18 My
	125	Spectroscopic Study of Luminescence Patterns in Diamond . . . . .	ANNA MANI 155	19 My
No. 4—October 1944				
1				
2	My	126	Wax and Resin Components of the Pericarp of Jambul Fruits ( <i>Eugenia jambolana</i> ) . . . . .	
3	My		P. BHASKARA RAMA MURTI AND N. V. SUBBA RAO 163	20
4	My	127	Condensation of Malonanilic Acid with Aldehydes. Part VII. Condensation with 6-Nitro-piperonal, 6-Bromopiperonal, 5-Bromovanillin and 5-Bromoveratraldehyde: Influence of several dissimilar Groups . . . . .	
5			P. I. ITTYERAN AND KANTILAL C. PANDYA 169	21
6		128	Experiments in the Group of Sympathomimetics. Part V. Relation between Chemical Constitution and Pressor Activity of Possible Sympathomimetics derived from the Benzene, Naphthalene, Phenanthrene and Isoquinoline Rings . . . . .	
	My		S. RAJAGOPALAN AND K. VENKATACHALAM 175	22
7	My	129	The Theory of the Thermal Expansion of Diamond . . . . .	
8	My		BISHESHWAR DAYAL 187	23 My
9	My	130	The Thermal Expansion of Metals at Low Temperatures . . . . .	
10	My		BISHESHWAR DAYAL 192	24 My
11	My	131	The Magnetic Properties of Tourmaline and Epidote . . . . .	
			A. SIGAMONY 200	25 My
12		132	Magnetic Behaviour of Iron-Pyrites . . . . .	
			A. SIGAMONY 204	26 My
No. 5—November 1944				
	133	Some Theorems in Operational Calculus . . . . .	N. A. SHASTRI 211	27
13	My	134	Magnetic Susceptibilities of Calcium and Strontium Ions . . . . .	
			MATA PRASAD, S. S. DHARMATTI AND S. V. GOKHALE 221	28
14	My	135	The Angular Divergence of the X-Ray Reflections by Diamond . . . . .	
			G. N. RAMACHANDRAN 245	29 My
15		136	Chemical Examination of the Rhizomes of <i>Zingiber zerumbet</i> , Smith . . . . .	
			N. S. VARIER 257	30
16		137	Magnetic Properties of Augite . . . . .	
			A. SIGAMONY 261	31 My

	PAGE
1251	Synthesis of Compounds Related to Santonin . . . . . (MISS) K. D. PARANJAPE, N. L. PHALNIKAR, B. V. BHIDE AND . . . . . K. S. NARGUND 381
1252	Synthesis of Cantharidine and Desoxycantharidine . . . . . (MISS) K. D. PARANJAPE, N. L. PHALNIKAR, B. V. BHIDE AND . . . . . K. S. NARGUND 385
1253	Opacity Changes during the Coagulation of Sols by Electrolytes . . . . . MATA PRASAD, S. GURUSWAMY AND N. A. PADWAL 389
1254	Fluorescence Reactions with Boric Acid and <i>O</i> -Hydroxy-Carbonyl Compounds, and their Application in Analytical Chemistry. Part III. Effect of Bromination of the <i>O</i> -Hydroxy-Carbonyl Molecule on the Appearance of Fluorescence Effects with Boric Acid . . . K. NEELAKANTAM AND V. VENKATESWARLU 401
255 Mys	Effect of Electric Field on Tyndall Scattering . . . . . . . . . . R. S. SUBRAHMANYA, K. S. GURURAJA DOSS AND . . . . . BASRUR SANJIVA RAO 405
256 Mys	Kombur Sesha Iyengar Kuppuswamy Iyengar—In Memoriam . . . . . . . . B. S. MADHAVA RAO 414

		PAGE
1288	Wax and Resin Components of <i>Leptadenia reticulata</i> . . . . . . . . . . P. BHASKARA RAMA MURTI AND T. R. SESHADRI	266
1289	Synthesis of 5:6-Dihydroxyflavonols—Part I . . . . . . . . . . V. BALAJAH, L. RAMACHANDRA ROW AND T. R. SESHADRI	274
1290	Chemical Examination of the Flowers of <i>Pongamia glabra</i> and a Note on the Glycosidic Components of <i>Butea frondosa</i> Flowers . . . . . P. BHASKARA RAMA MURTI AND T. R. SESHADRI	279
1291	Raman Effect in Aqueous Solutions of Some Inorganic Gases . . . . . . . . B. POORNACHANDRA RAO	292
1292	Elastic Constants of Crystals. A New Method and Its Application to Pyrites and Galena . S. BHAGAVANTAM AND J. BHIMASENACHAR	298
1293	Elastic Constants of Piezo-Electric Crystals. Zinc Sulphide . . . . . . . . S. BHAGAVANTAM AND D. SURYANARAYANA	304
No. 6—December 1944		
1294	Spectroscopic Analysis of Soil Colour . . . . . . . . . . B. RAMAMURTHY AND B. VISWA NATH	311
1295	Fluorescence and Absorption Patterns in Diamond at Low Temper- atures . . . . . ANNA MANI	323
1296	On the Stress-Strain Velocity Relations in Equations of Viscous Flow . . . . . B. R. SETH	329
1297	Consistency Equations of Finite Strain . . . . . B. R. SETH	336

298

297

300

301

1302

130

130

130

130

130

130

130

12