# RAMASWAMY GOPALA AIYAR

(20 January 1887 - 19 January 1971)

Biog. Mem. Fell. INSA, New Delhi 38 1-8 (2010)





R. Gopala Aujar



# RAMASWAMY GOPALA AIYAR (1887-1971)

#### **Elected Fellow 1938**

#### EARLY EDUCATION

RAMASWAMY GOPALA AIYAR was born on the 20<sup>th</sup> of January 1887 in Mannargudi, Tanjore District of Composite Madras State. His parents were Sri Ramaswamy Aiyar and Srimati Alamelu Ammal. His father was an advocate. He had his early education in Finlay Wisley Mission High School, Mannargudi from where he took his Matriculation Certificate. He joined the Presidency College, Madras for higher studies. He completed his FA Examination followed by BA (1908) and MA (1910) specialising in Zoology. During his days of graduate studies, he came under the benign influence of eminent Zoologists like Dr GC Bourne and Sir K Ramunni Menon. Later as required by the educational rules for a teacher, he took his LT (Diploma from Teachers College), Saidapet in 1913.

As a student, he was good in his studies. He has been awarded many prizes for his proficiency. He took keen interest in sports, was a very good football player and was a member of the State team. He was a top class swimmer.

#### ACADEMIC POSITIONS

After taking his MA degree in Zoology, Professor was recruited to the State Educational Service as Assistant Professor and posted at the Presidency College, Madras. He was then shifted to the Natural Science Teacher's Training College at Saidapet for one year between 1917 and 1918. He came back to Presidency College.

When the Maharaja's College, Ernakulam applied for affiliation for the degree courses, his services were requisitioned by Maharaja's College to organize and develop the Department of Biology. He did his assignment wonderfully well during this two year duration 1925-27. This earned for him a name as an outstanding teacher. In 1927 he served as a Member of the Madras University Quinquennial Commission under the Chairmanship of Sir SE Ranganathan. He then reverted to his original position in Presidency College, where from he was deputed for higher studies in Marine Biology to the Liverpool University in 1928-29. In Liverpool, he took M.Sc. by research in Zoology with specialization in Marine Biology and Fish Culture. Sri Aiyar visited the Marine Biological Laboratories at Port Erin, Plymouth Naples and Heligo Land (off the coast of Bremerhaven in Germany).



On his return to Madras in 1929, after his study leave, he joined the Presidency College Madras, where he worked as Professor of Zoology and Director of the University Laboratory. He retired in 1945.

The decade of Professor Aiyar's directorship represented the most glorious era of the Department of Zoology and witnessed the publication of a series of original papers. These have added significantly to the knowledge the marine and brackish water fauna of the Madras coast. Professor Aiyar showed sustained ability in directing investigations on marine biological problems encompassing a broad spectrum. His mastery and competence in the realm of Marine Biology remained unmatched and in those days his authority on the subject was seldom questioned. Professor Aiyar may well be called the Father of Marine Biology in India and the Department of Zoology, Madras University the best Centre for Marine Biology in South India.

On his retirement, Andhra University, which was in the early stage of development, invited him to take up Professorship in Zoology. He accepted the assignment in 1946. He did pioneering work in establishing and developing the Department of Zoological Studies and Research. He continued in Visakhapatnam till 1951.

#### **RESEARCH WORKS**

The foundation for his research was laid in Liverpool. He pursued his research in Presidency College. The opening of a Zoology Research department has been approved by the senate in 1926-27. The nucleus of the department was in one room in the Madras Marine Aquarium with Sir Ramunni Menon MA (Cantab), IES Professor of Zoology, Presidency College as Honorary Director with one student working under him. On Sir Ramunni Menon assuming office as Vice Chancellor Madras University, Professor Gopala Aiyar was asked to shoulder the responsibilities of Honorary Director to execute research projects. For want of space the department functioned in one room in the aquarium. When three more students joined, the department was given a room in Limdi Gardens, Royapettah.

Work on the construction of Laboratories in Zoology, Botany and Biochemistry was taken up in 1930 and completed in 1933. Professor Gopala Aiyar was selected as Professor and Director of the Zoology Laboratory by a special Selection Committee in 1933. He continued in that position for over a decade and retired in 1945. He organized the department with great care and foresight. The department soon gained the reputation of being the best in the country in the field of Marine Biology. During those days, no University Grants Commission, Departments of Science and Technology or Biotechnology existed. Research Assistantships and Fellowships were limited to the resources of the University. Normally not more than six students could be accommodated in a year.



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Apart from the University work, Professor used to take students on Biological expeditions to Crusadi islands in connection with research schemes in Marine Biology. He had visited Rameswaram Island along with his students. He collected during these expeditions a number of rare specimens of marine life which are now preserved in the University Laboratory. He set up a small marine aquarium, filling the aquarium regularly with sea water brought in mud pots, which later changed to pumping sea water directly the sea. This was subsequently abandoned on account of pipes being silted up with sea sand.

Students flocked to the department from all parts of South India. Professor Aiyar was himself doing research guiding all the research students. There was only one Professor and one Store-Keeper in the department at that time. He managed to publish 21 single author research papers till 1940. The senior research students and fellows also contributed their own papers while the emphasis was on getting a research degree. There were no Indian Journals in the country at that time. Professor CV Raman started a scientific journal '*Current Sciences*' which was published by the Indian Academy of Sciences. Most of the papers from the department were sent to this journal.

Professor Aiyar has made original contributions to the knowledge of the morphology, embryology and bionomics of Indian Polychaete worms, Echinoids and fishes and contributed jointly with his students numerous original articles on the and brackish water fauna of the Madras coast and on the cytology of various marine animals more particularly, on the oogenesis of the invertebrate marine animals.

One aspect of Professor's character is that he would never allow his name to be mentioned as a coauthor of a paper unless he has contributed materially to that paper. He was a Professor, par excellence, doing research himself. He published many papers as a single author papers if the entire work was done by himself. This is typical of this Professor which was admired by his students.

Since he had established his reputation, he was invited to be a Member of Board of studies, Academic Council, Selection Committees and evaluation of PhD theses of various Universities.

### **RESEARCH STUDENTS**

Students of Professor were sought after by the fisheries department of several State Governments and Survey of India. Several of them occupied positions of responsibility as Director of Fisheries in various states and Professors in well established Universities. Among them the following may be mentioned.

### 1. Dr NK Panikkar

A doctorate from this laboratory became the Director of Marine Fisheries Institutes Government of India, Fisheries Development Advisor to the Government of India

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Director, National Institute of Oceanography and Vice Chancellor, Cochin University of Technology.

# 2. Dr TJ Job

Director of Fisheries, West Bengal and Advisor, FAO, Bangkok.

## 3. Dr K Baskaran Nair

Professor and Head of the Department, University College of Science, Trivandrum. Director of Public Instruction, Kerala.

# 4. Dr PN Ganapathy

Professor and Head, Department of Zoology, Andhra University, Waltair. He took his PhD and DSc from the Department of Zoology, Madras University in 1938 and 1942. He was elected Fellow INSA in 1961, Indian Academy of Sciences 1953, Zoological Society of India 1954. He received several awards.

## 5. Dr S Jones

Director General, Marine Fisheries Institute, Government of India and Advisor, Marine Fisheries Department, Kerala.

### 6 Dr MK Subramanian

First Professor of Genetics, Indian Institute of Science, Bangalore.

# 7. Dr KE Ali Kunhi

Officer in the Central Island Fisheries Institute, Government of India, Advisor, Fisheries, Kerala State.

### 8. Dr Kelappan Nair

Assistant Director of Fisheries, Calicut.

### HIS FAMILY

Professor Gopala Aiyar married Srimathi Meenakshi Ammal. They had two sons and three daughters. The first son, Kuppuswamy, served the Indian Army as a Doctor, was Dean of Army Medical College, Pune. He retired as a Vice Admiral. The second son, Ramaswamy, was with the Indian Audit and Accounts Services for a while and relinquished his position. His eldest daughter Mrs. Rangarajan has furnished personal data for this write up.

# AWARDS AND HONOURS

Professor Aiyar was the President of the Zoological Section of Indian Science Congress in 1933 at Patna and Joint Organising Secretary along with Dr AL Mudaliar during the Indian Science Congress at Madras in 1940. Professor CV Raman chose Professor Gopala Aiyar as a Foundation Fellow of the Indian Academy of Science

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1935. In recognition of his original work, he was awarded the Curzon Prize by the Maharaja of Travancore. He was elected Fellow the Indian National Science Academy in 1938. He was President of Madras Science Club in 1937.

### SOCIAL WORK

Professor Gopala Aiyar was the President of the Gopalapuram Educational Society since its inception in 1927 till his demise in 1971. He, along with a few others, established an elementary school for the children of the locality. This developed gradually, during this period, to two high schools, one for boys and the other for girls. With the benefaction of the family of Late TR Ganapathy Iyer, a resident of Gopalapuram Colony (named after Professor Gopala Aiyar) a Krishna Temple was established through a Religious Society. Krishna Idol for this temple was accidentally found during an archaeological excavation undertaken by the Government around 1910 in Tiruthuraipundi in Tanjore District around 1910. This temple is opposite the residence of the present Chief Minister of Tamil Nadu, Hon M Karunanidhi. This temple is being visited every day by many devotees. It is widely believed by many that worship in this temple will help in getting visa to go abroad. This Gopalapuram, approximately 3 square kilometers in area, today houses two top ranking schools of the city, DAV Boys and DAV Girls High Schools. In the western end of this suburb is the Church Park Convent and at the eastern end Music Academy Madras, the seat of Carnatic Music which confers Sangeeta Kalanidhi, the highest distinction in classical music year after year. Prof Gopala Aiyar would not have dreamt in 1927 that his efforts in establishing a colony will blossom into a very busy and important landmark of Chennai city in three score years!

#### **GOPALA AIYAR AS A PERSON**

Professor Gopala Aiyar was a man of integrity and character. He was a disciplinarian. He was a brilliant Professor and an academician. He breathed his last on the 19<sup>th</sup> of January 1971. The towering personality of this individual and the commanding influence he had exerted, particularly in the field of Marine Biology, are still vivid in the minds of many present day scientists.

#### **EPILOGUE**

One may wonder as to why the memoirs of Professor Gopala Aiyar are now published. Neither was I born when he became a Fellow of INSA, nor have I met him. INSA has been receiving letters from Zoologists of this country requesting his memoirs. I searched the INSA archives and found material on Professor Aiyar collected 25 years ago which has not been published. I thought it is my duty to rearrange this material in the form of a manuscript. In my capacity as Editor I consider this an honour to get the opportunity to prepare this write up. I thank Dr

TRS Tampi and Mr PS Vaidyanathan who sent valuable information to INSA on Professor Aiyar several years ago.

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