## A Tribute to Dr. E.G. Silas

Dr. E.G. Silas (90) the doyen of Indian marine fisheries and mariculture research expired on 27-04-2018. He was my research guide and mentor under whom I worked for 20 years in Cochin from 1965 to 1985. I was his first Ph.D. student.

As a Tribute to him I reproduce below an extract from the article under the title "Golden Moments in My Research Career" written by me and published by the Central Marine Fisheries Research Institute (CMFRI), Kochi in one of its publications entitled "Down Memory Lane" published in 2007 during the Diamond Jubilee Year of the Institute.

Dr. K.J. Mathew

Designation at retirement from CMFRI, Kochi: Principal Scientist
Period of service: 1965-2000

## The golden moments in my research career



I became a part of CMFRI on the $16^{\text {th }}$ of September 1965 that was 18 years since the inception of the Institute and the Indian Independence. I can bring to the forefront of my memories a lot many moments both golden as well bitter during my research career. As there is no room for the bitter experiences in this commemorative compendium I leave them in the background for a noble burial.

My first posting was in Cochin. On the day of my departure from Mandapam Camp Dr. Jones, the Director while briefing me personally in his office told me "Mr. Mathew I am posting you to Cochin to work in the Marine Biology Division under Dr. Silas, an eminent scientist and a hard worker. You see, he is a person doing research not for the sake of money".

I felt very happy at his words because to work with a person dedicated cent percent to the cause of science would definitely be an exciting experience and I thought I would be greatly benefited by his knowledge and experience. I also felt fully confident about my future research career and I was eager to meet Dr. Silas at the earliest. But all my enthusiasm got evaporated in the evening of
 the same day when Mr. K.K.R. Kumar, the Administrative Officer cautioned me with a startling revelation about Dr. Silas. We were co-passengers in the train from Mandapam to Coimbatore. During our conversations he asked a question as to how I assessed Dr. Jones. " Sure, he is a versatile personality having deep knowledge not only in science but also in philosophy, vedantha and many more things. He is a good administrator too but,
sir, he appears to be a very hot person" was my answer. Suddenly Mr. Kumar interrupted me by telling "Mind you, if you say Dr. Jones is a hot person then Dr. Silas with whom you are going to work is ten times hotter than Dr. Jones!" and this I soon experienced in Cochin.

Even now I can remember only with increased heart beats those evenings' and late nights' (such were the times when Dr. Silas used to 'dissect' his research staff) marathon sessions I spent with Dr. Silas answering his never ending questions about the research project, progress in the work and collection of literature, explaining the works done, discussing further programmes etc. Geography was another weakness for him so that I had to keep an atlas within hands reach. At any moment a question could be expected as to the location on a tiny island or a coastal place anywhere in the world. He wanted such a perfection in work that no one could satisfy him easily. He has a special eye for finding out mistakes and once found out one was sure to get bangs left and right. All those times I remembered the words of Mr. Kumar. I was totally dejected. Very often I blamed myself for my folly to have left the post of lecturer in a first grade college to join CMFRI just for being tortured! Well soon the fear and hatred gave way to respect and admiration. I found him to be a treasure of knowledge. To work with him was really a blessing and a privilege. Also I recognized that the fury was just a mask on his face and it was all for refining the scientist in me. Soon I started getting benefited out of my marathon discussions with him. Later I really enjoyed spending time with him and now I owe him greatly for all my scientific achievements and contributions in marine science.

It was during one such nights when I was engaged in the analysis of some deep water plankton samples that I noticed under the binocular microscope a totally different euphausiid than what I had familiarized in the literature or in the samples I had examined. I became highly excited as my mind concluded it to be a new species. Straight I went to Dr. Silas' room and announced my discovery. He too became excited for the reason that there are hardly 100 species of euphausiids in the world. I showed him the specimen and logically proved its identity. For me, a novice in research, hardly having a year's experience, the discovery was a golden moment. My maiden research paper was on Stylocheiron indicum Silas \& Mathew 1967.

Among many things what Dr. Silas taught me in research was that there should not be any classification of work among personnel in the field or in the laboratory and that a scientist should not be time conscious. I personally experienced these qualities in him in the laboratory, during the Varuna cruises and in many field trips with him. Such qualities imbibed from him were of great help throughout my research career especially during my Antarctic days.

I recollect here one interesting incident during one of my Varuna cruises with Dr. Silas. Usually a station would come once in three hours both day and night and we were expected to work at all the stations. There would be hardly one hour free time between two stations for personal needs including sleep. Such continuous work round the clock coupled with sea sickness and consequent starvation would make a person totally tired after a few days of the cruise. One day it so happened that after a mid-night station I
went to bed for a quick nap. In a moment I sank into deep sleep. Suddenly I heard a banging sound from the lower berth where Dr. Silas was lying "Get up Mathew, we are at station" to which I did not respond immediately. Next it was an outburst and the words came out were "What funny thing you are doing, you are sleeping in the mid night? Come on I say you attend to your duty" and he left the cabin. Such was his duty consciousness. (This training came to my help when I spent 36 sleepless hours in the Antarctic Ocean making hourly collections for a diurnal study without being assisted by anybody and when I spent another 36 hours in a country craft at the mud bank in Ambalapuzha during the peak monsoon period being protected by a rain-coat against the rain and an umbrella against the sun). But behind such a tough nature, I could sense a soft heart in him which probably most others are not aware of. I had a couple of occasions to feel the warmth of his soft heart.

It was during one of the monsoon cruises onboard Varuna with Dr. Silas as the leader. As usual I was severely sea sick but still attended to all my works partly out of fear and partly out of duty consciousness. I was tired too due to no intake of food. Anything consumed would come out in the next moment; such was the situation. Finally I was bed ridden and could not even get up. I thought I was dying. As I gradually slipped into a state of slumber I heard a soft voice asking me to get up. When I slowly opened my eyes I saw Dr. Silas standing in front of me with a bowl in his hand. He gently touched my shoulders and said "get up Mathew and have this "kanji". "No sir I can't take, I think I am dying" said I. "You see nobody has ever died out of sea sickness, you must drink it" he said again. I slowly got up and received the bowl from his hand but hesitated to drink. He further persuaded me by telling "Believe me, if you drink it you will be fine from now". He also added "Unless you drink I am not leaving this place". I had no other option than drinking the kanji. The spirit and confidence he poured into my heart by his soothing touch and lovable words made me fit again and soon I was back at work. It was another golden moment in my career. Later I was a frequent voyager onboard Varuna and I totally recovered from sea sickness. The seasoning in Varuna greatly helped me during the Antarctica Expedition. When almost everybody from the Army, the Air Force and even the Navy fell sick I stood tough like a seasoned sailor.

The Institute had a project on the seed resources in the surf and estuaries of Kerala and Tamil Nadu headed by Dr. Silas. The Cochin team was led by me. We had to cover from Ponnani to Quilon. Altogether 40 stations were to be covered in seven days every month. For accuracy and authenticity of sampling we decided to do all sampling works by ourselves which meant 6-7 full-body baths every day. In the surf the collections were from almost neck deep water which was risky too. Such frequent sea baths and loitering along the beaches in the sun and the rains gifted me with an attack of pneumonia and I was hospitalized. Everything was uncertain. Visitors poured in. One morning when I was half sleep in the sick bed I heard a familiar voice asking my wife who was beside me almost weeping. "Is he sleeping"? It was Dr. Silas. She could only say "No". Then I sensed a soft touch on my chest and a few words. That healing touch and soothing words gave me the cure which the medicines could not give me. I was experiencing yet another golden moment in my life. On that day I found the real 'man' in him.

Now I invite the readers to the Goan port where Finnpolaris the Antarctic bound ship was moored. It was on the evening of $03{ }^{\text {rd }}$ December 1983 when the full contingent of the Third Indian Antarctic Expedition was assembled on the ship's deck for bidding farewell to the motherland. Everybody was highly enthused. With the sun setting in the horizon the military band sang "Saare Jehan se acha, Hindusthan hamara" which filled everybody's heart with patriotism and pride. Yet another golden moment in my life! The following four months were full of activity and hard work. Looking back I am fully satisfied for what all I did in Antarctica which was more than what I had anticipated.

To list some of the memorable moments before, during and after the Expedition are the days I spent on the Himalayan glaciers at an altitude of 16,000 feet, the stormy sea, the first sight of an ice berg, the fully ice covered sea, the icy continent, the helicopter journeys, the sight of the penguins, the 24 hour sunshine, the crash of an helicopter, the storms of 200 km or more velocity and above all the personal meeting with the Prime Minister Mrs. Indira Gandhi after the Expedition.

Many more memorable moments remain fresh in my mind but narrating them all may make this treatment more elaborate which would increase the job of the editor. I shall just mention a few important ones such as the conferring of Jawaharlal Nehru Award for outstanding research, the work on zooplankton of Sagar Sampada, the establishment of the museum in the Headquarters, the renovation of the library, the prawn farming and the Lab-to-Land Programme in Quilon, the conduct of the First Sagar Sampada Workshop and the publication of its proceedings, the editing of IJF, MFIS, Bulletins and Special Publications, the voyages in the Arabian Sea and the Bay of Bengal and the day of my retirement from CMFRI. Recognizing my research work soon after my retirement the ICAR appointed me to the position of Emeritus Scientist which literally means Honorably Retired Scientist and it again gave me an opportunity to continue my research work. This I consider a golden feather on my cap. Looking back I am fully satisfied as a scientist. The God-given opportunity to remain at one place throughout my official period may probably be one of the reasons for my successful research career.

Thank God!


Dr. E.G. Silas is being honoured with a 'ponnada' on his attaining 90 years of age, at a function arranged by CGOA in connection with the First Dr. K.J. Mathew Endowment Lecture and presentation of Dr. K.J. Mathew Endowment Award to the first rank holder in B.Sc. Zoology from M.G. University, Kottayam. The First Endowment Lecture was given by Dr. Silas.

