



T.S.Sreejith, an entrepreneur based in Kerala received a national award in last August-The Special Recognition National Award given by the ministry of Micro, Small and Medium Enterprises (MSME) for the research and development work done in his firm, Environmental Measurements and Controls(EMCON).

EMCON, as the firm is called, is situated at Kadavanthra in Kochi. This is a compact unit with a handful of workers, and the firm is into manufacturing equipment that researchers need to get data from the open environment, like the sea, remote agricultural and investigation sites, in the soil, air and water.

“This is the first time that a firm in Kerala is getting an award in the R and D category., and given by the Ministry of MSME,” proudly claims Dr T. K. Shivdas, father of Sreejith. Dr Shivdas was formerly the principal scientist and head of the engineering division in Central Institute of Fisheries Technology. The most interesting aspect is that EMCON won the award for the kind of research and development that they did for designing customised equipment made for collecting data from the open environment.

EMCON was financed at its inception by SBI’s small scale industry branch. Now, this firm is affiliated to The National Small Scale Industries Corporation, after strict scrutiny on all aspects.

Even to procure this prestigious award, the firm had to undergo strict scrutiny and criteria.

The niche area that the father and son duo works is in sensors that are the heart and soul of all instruments used in research work done in the open by different institutions like agricultural universities, NIT’s, IIT’s, ONGC and the Defence services.

In order to measure the under water ocean currents, instruments with sensors that can give correct data have to be placed strategically and safely out in the open. If correct data is not procured, it may result in inaccurate research findings. “We make customised sensors and measuring instruments after studying the needs and locations,” says Sreejith who learned everything about sensors from his dad and not from any university. His heart was not into going into business of any kind or getting into research at all. It was only after he had enrolled for an Art of Living course that things changed for him.

Sreejith went into business only because his spiritual Guru advised him to look after EMCON.

“Grace paved the way for my growth, and I owe this recognition by the ministry of MSME entirely to my Guru” affirms Sreejith.

“Since sensors are not a mass produced equipment, we make frequent visits to the area where the equipment has to be installed and after studying several aspects, we design them. It has to be location specific and has to be manufactured keeping in mind the socio economic conditions of the area. Ninety percent of our raw materials are indigenously available.” Sreejith explains. “Another aspect that threatens the world is global warming and its aftermath. Researchers are investigating how plants and insects may be affected years ahead. Hence, simulated conditions are made to study the changes. Again, sensors come into play to control temperature, humidity and other aspects and to measure the changes too.”

“For instance, in simple parlance, impact on paddy, if carbon dioxide levels are raised.: once carbon dioxide levels are increased, temperature levels also increase. And research is conducted on the after effects thereon, by simulating conditions in the confines of a lab.”

Sreejith loves the challenge each project presents before him. The department of oceanography wanted the Wembanad lake which is 30 m deep to be measured in ten places for tide. The lake has only two inlets and the tide keeps coming inwards. The oceanography department wanted ten tide gauges to be manufactured. Sreejith designed tide gauges that could measure temperature, test salinity and depth. If the same tide gauges were to be exported, each one would cost the department of oceanography approximately 20 lakhs each.

Sreejith conducted the survey within three months and the entire package of ten automatic tide

gauges were delivered to them at just Rs 8 lakhs. ! “Such personalised service can never be obtained from a foreign company.” asserts Sreejith. “All our products are designed for the world market..We have even developed a special automatic customised vending machine for art galleries in Australia. As the people visiting the galleries approach each art piece, these sensory vending machines start off automatically providing self explanatory guidance on each art piece. These are called ultrasonic distance sensors.’

He has wide plans for expanding into hitherto untapped fields. He is on the verge of inventing a milk quality monitoring equipment. He has successfully completed the project and is on the verge of incorporating it in the milk producing associations.

Recently he was in Chennai to meet up with scientists at National Institute of Ocean Technology at Pallikarai. “Their requirement is to deploy equipment like huge gas cylinders at different points in the ocean, after programming them. These go deep into the ocean, for instance up to 2 km, and rise up again, thus providing much needed info on temperature, salinity and depth. This information is then transmitted to the satellites.” Talks on procuring this project for EMCON was underway and he is awaiting their decision to go ahead with the project.

We wish this young enterprising entrepreneur, all good luck and success.