

## Contributions of the winner of the Janaki Ammal-National Bioscientist Award- 2019

New Delhi, May 14: The loud applause in the auditorium of National Institute of Immunology, New Delhi on 26<sup>th</sup> February 2020, during the occasion of 34<sup>th</sup> DBT Foundation Day celebration, was not just an encouragement to Dr E. V. Soniya, Senior Scientist, DBT-RGCB, who has won the Government of India, Department of Biotechnology's prestigious Janaki Ammal-National Bioscientist Award 2019. It instilled further motivation urging her to reach even better heights. It was also a tribute to many working women who struggle to strike a balance between family and career. This outstanding lifetime achievement award proves that it is possible to achieve one's dreams if you have a penchant for your goal.



Dr. Soniya started her career at Central Tuber Crops Research Institute, Thiruvananthapuram in 1995. Later, at RGCB, she discovered her deep curiosity for the molecular biology of plants and their interaction with pathogens and the environment. Her focus was on the stress biology of spice crops like black pepper, ginger, etc. and also the metabolic pathway for the natural compounds biosynthesis. In due time, she established herself as a scientist at RGCB. Her work mainly focussed on the “Characterization of plant Type III Polyketide Synthases (PKSs) involved in the biosynthesis of medicinally important phenylpropanoids and understanding host pathogen interaction during quick wilt disease of black pepper using different biotechnological approaches. The already identified plant derived Type III PKSs and their derivatives from plants like *Aegle marmelos*, *Emblica officinalis* etc. provided a novel resource for metabolic engineering that can assist the production of existing or novel plant-derived molecules with pharmaceutical and nutraceutical potential. For a period, she also served as an INSA/DFG visiting Scientist at Max Planck Institute of Chemical Ecology, Germany. Her interest in the novel areas of plant biotechnology resulted in quality research publications and presentations. Dr. Soniya is also an elected Fellow of the National Academy of Sciences and the Kerala Academy of Sciences.

Her strong leadership skills got her the position as the Chief Scientific Officer of Molecular Forensics and DNA Technologies (MFDT) which provide human DNA Fingerprinting

services to judicial, crime investigating and law enforcing agencies as well as wildlife forensics. MFDT also provides services for DNA Barcoding of plants, animals and microbes. Under her supervision, the challenging work of identifying the unrecognizable dead bodies following the Puttingal fireworks disaster and Ockhi cyclone tragedy was carried out successfully. She also shouldered the responsibility to create a DNA fingerprint data in the ownership details of captive elephants. The fingerprinting of elephants will save the animals from illegal trading.

It was in recognition of these valuable contributions to the society that Dr. Soniya was selected for this prestigious Janaki Ammal-National Women Bioscientist Award - 2019 by the Department of Biotechnology.

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