Dr. K. Ruckmani is a visionary innovator in pharmaceutical technology and the first woman from Tamil Nadu to be awarded a doctorate in pharmacy. She qualified the Graduate Aptitude Test in Engineering (GATE) in 1992 and went on to complete her M.Pharm and Ph.D. from Jadavpur University, Kolkata. She pursued her post-doctoral research at the University of South Florida, USA, as a DST-BOYSCAST Fellow.

Dr. Ruckmani began her professional journey as an Analytical Chemist at Tablets India Limited, Chennai. Her growing passion for academia and research led her to take up a position as Lecturer at Periyar College of Pharmaceutical Sciences, Tiruchirappalli, affiliated with The Dr. M.G.R. Medical University, Chennai. Through her commitment, leadership, and dedication to education, she rose to become the principal of the same institution.

She later joined Anna University, Tiruchirappalli, where she served as a professor for nearly two decades, contributing extensively to both academic and research domains. During her tenure, she established an autonomous research center and founded the incubation center EDII-ABIRF (a Section 8 company) to promote start-ups and strengthen academia-industry partnerships. Under her leadership, nearly 20 Memoranda of Understanding (MoUs) were signed. She also spearheaded the establishment of two DST-supported national facilities—National Facility for Drug Development for Academia, Pharmaceutical and Allied Industries (NFFDD) and National Facility for Bioactive peptides from Milk (NFBP)—equipped with advanced instrumentation to accelerate translational research and technology transfer.

Dr,Ruckmani successfully secured research grants totaling approximately ₹25 crores. She also served as the officiating Vice-Chancellor of Anna University, Tiruchirappalli.

With over 30 years of academic and research experience, her leadership roles have included serving as Head of Department for 20 years, Principal for 6 years, and Director of a Research Centre for 11 years. She has actively contributed to university governance in multiple capacities, including as Board of Studies (BoS) Member, Faculty Chairman, PCI Inspector, AICTE and NAAC Assessor, and is a Certified Lead Auditor for ISO 9001:2015 and ISO 14001:2015.

Her dedication to impactful research has earned her a place among the top 2% of the world's most influential scientists, as recognized by Stanford University since 2021. Her collaborative efforts have resulted in numerous scientific publications, 4 granted patents (Indian and US), and 6 additional patent filings.

A passionate mentor, Dr. Ruckmani has guided 25 Ph.D. scholars, 2 MS (by Research) students, and 9 postdoctoral fellows, including international researchers. She continues to mentor six doctoral scholars, embodying her lifelong commitment to academic excellence and mentorship.

Her accolades include prestigious recognitions such as the Tamil Nadu Senior Scientist Award, Tamil Nadu Scientist Award, Tamil Nadu Young Woman Scientist Award (State Government of Tamil Nadu), Innovation Award, Research Excellence Award, Distinguished Researcher Award, and multiple appreciation awards from Anna University, Chennai. She has also received honors such as the Women Achiever Award, G.P. Nair Award, Prof. S.P. Thiagarajan and Prof. S. Rajarajan National Endowment Award for Best Patent in Biosciences, Shri P.K. Das Memorial Lifetime Achievement Award, and Distinguished Scientist Award.

Dr. Ruckmani plays a prominent role in the scientific community as a reviewer and editorial board member of several reputed national and international journals. She is frequently invited to serve as chairperson, keynote speaker, and resource person at esteemed seminars, conferences, and workshops.

In addition to her post-doctoral work at the University of South Florida, she has participated in academic leadership programs at Ohio State University, USA, and the University of Edinburgh, UK. Her expertise has gained international recognition, leading to professional engagements in the USA, UK, and Malaysia.