



MAKING FOODS SAFE & FREE FROM PATHOGENS

RENU AGRAWAL



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Dr. Renu Agrawal is the Ex. Chief Scientist at CSIR-CFTRI, Mysuru, India and rural program coordinator for outreach activities at CFTRI. She has over 20 patents to her name, with 65+ publications in International and National Journals. She has presented more than 160 papers in various national and international conferences and delivered more than 600 talks. She has guided students for M.Sc, M.Phil and PhD in Biotechnology and Microbiology. She has represented India as a team leader taking scientific delegation for the Asia meet at

Indonesia, Bali nominated by DST, Government of India. She had her PhD from University of Rajasthan, Jaipur. Her areas of specialization include biotransformation and probiotics. Her research involves lactic acid bacteria, yeasts and *Bacillus* as probiotic properties inhibiting harmful diseases and reduce the use of antibiotics improving health in the society. Her group has developed greener probiotic technologies used by the common man. As CSIR-800 Rural development coordinator she led CSIR for CSIR 800 to give a better quality of life to 800 million people in India through scientific and technological intervention. Many awareness camps, demonstrations of technologies were conducted.

She has been awarded at multiple scientific associations. Some honourable mentions are Scientific fellow awards as FAMI, FNABS, FSAB, FISBT. She has been awarded Karamveer Chakra by REX-UN, Best woman scientist NABS, Woman achiever from International Guild of woman achievers, Reflections Excellence Award from Rotary Innerwheel, Kissan Ratna puraskar, Abdul Kalam Lifetime achievement Award, Nari Shakti Award to name a few. She has been selected as the “Best woman scientist” by National Academy of Biological Sciences, felicitated by Rotary Inner wheel for scientific excellence with “Suguna Award” and felicitated at various scientific and societal forums. In Rotary Innerwheel she was awarded the Best secretary for two times and also Best ISO twice in the district 318. She is the editor of six Research Journals and has authored scientific books on probiotics and Utilization of agricultural wastes. She has written many book chapters with Marcell Dekkar, USA and Taylor and Francis, UK. Her work has won many best paper awards at the national and international conferences. She has taught as faculty of M.Sc Food Technology at CFTRI and to ACSIR students. She has served as the president of ‘Association of Microbiologists of India’, Mysore chapter. She has been on the board of many international Technical Advisory committees at Dubai, Bulgaria, Argentina and Indonesia. She has been on the National committees of NCERT of National Science Talent Search, scientist selection boards of UPSC, DST and DBT and many International technical committees. She is an Executive committee board member of “National Academy of Biological Sciences”.

She regularly writes for City Today and BiostandUps a science magazine. She has been nominated as an Expert Committee member on Scheme for Young Scientists and Technologists (SYST), Department of Science and Technology, Govt. of India, nominated as a member of National Experts Advisory Committee (NEAC) from Government of India, Ministry of Science and Technology for evaluating and monitoring various programmes involving children, Children science congress, innovative research and outreach. Other committees of DST, Gov. of India where she is a member are TIASN (technological intervention for addressing societal needs, ASAR , CODER, projects to be taken in cold and Desert areas, “Pandit Deen Dayal Upadhyay Gram Sankul Pariyojna”, AWSAR for augmenting writing skills and ‘KIRAN” which involves projects for women. She has been nominated to the Consultative Group made by the Principal Scientific Advisor, Dr. Vijay Raghavan, cabinet rank, who reports to the prime minister of India for inputs on science and technological developments in the country. She has been honoured as “SHERO” by Biostandups, an online science magazine and is on their editorial board. She is also involved in the upliftment of rural education of Karnataka through “Pratham” in teachers training workshops and in translating course material to be made into short videos to make science easy and fun for the children. For 35 years, Dr. Renu has been leading innovations and change in organisations. Her programs and interviews are telecasted on Doordarshan (DD science).

Currently she is a science communicator, reviewer, author , visiting professor in many universities and colleges and a National Expert Advisor in the ministry of science and technology. Her commitment to work can be seen as she was taken as Project Advisor by CFTRI even after her retirement. She has been serving the society by her work. She served as the secretary of “CSIR Pensioners Welfare Association, Mysuru centre. She is a philanthropist and has been running many fellowships and national level competitions for poor meritorious students, constructed pre fixed auto stand in Mysore at Hardinge circle for public use. She has donated a serum analyser for rapid detection of HIV to Asha Kirana hospital at Mysuru.

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This book will enrich the readers on the major improvement been made in food safety management in the last twenty years, it will explain food hygiene, the journey of research been taken in food safety till date and the challenges that we are going to face in future to ensure food safety and its wholesomeness. It also includes the role and responsibilities of the various sectors of society, namely governments, food industry, consumers and academia and also deals with HACCP, GMP practices and Food laws. This book is unique as it has included the causes of food allergies, adulteration, genetically modified seeds and crops, GM fruits and vegetables and the effect on human body. It has also discussed the difference between traditional and organic farming. The book will be helpful to know the foods to be used in space shuttle and also discussed the role of FDA and WHO in food safety which is a very important aspect in food safety, the role of bacteriocins obtained from bacteria of GRAS status; as natural preservative is very important. The author has discussed this aspect in detail. This book includes the role of packaging in food is another very important aspect in keeping the shelf storage of food.

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