



Dr. Karthik Chandran

INTERVIEW

BY AARZO NANDAL

The India born US scientist Dr. K Chandran is known in the field of environmental biotechnology for his achievements and contributions for the society.

In an interview with Biotech Express, Dr Kartik Chandran talks about how he got his start and reveals how to make a successful career after studies. He is a true inspiration for budding talent of India.

Q. Sir when you started your research career and tell us about your early education.

I have two degrees one in Chemical engineering from IIT

Roorkee and other is PhD in Environmental engineering from University of Connecticut.

I also worked in industry for 6 years after PhD.

I started my research career as Graduate Research assistant in year 1995 and then I became Assistant professor in Columbia University in the City of New York in 2005 and serving till

date.

Q. Where do you work and How long have you been working here?

I am currently working as Associate Professor in the department of Earth and Environmental Engineering, Columbia University, USA from 15 years.

Q. What is your research title and why you chose only this? What questions are you trying to answer in your work?

After chemical engineering and environmental engineering I mostly do environmental microbiology.

Microbes can do many many things just that we don't realize what we can do.

Our group employs multidisciplinary strategies to study microbial communities in natural and engineered systems. We are guided by the ultimate vision that gaining a better understanding of these communities will allow us to fully harness their power towards achieving several objectives such as waste treatment, bioenergy, anti-

microbial therapies and ultimately contribute to improved environmental and public health. Our main areas of Concentration are Environmental Biotechnology, Environmental Nanotech, Environmental Microbiology, Public Health Microbiology, Water and Wastewater Treatment, Bioenergetics (Microbial fuel cells and biofuels) and Earth and Environmental Engineering.

Q. Do you face any problems

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while doing research.

I always try to come up with something which has such a significant impact and doing good work to address that so the problem *perse* is more of a challenge

Q. How the expenses incurred during research work are fulfilled?

Funding is a great problem in research and like everybody we have shortage of it too specially

after recession in USA. We manage well to get funds so that our team can work effectively.

Q. Can you tell us about your future goals?

We made lot of mistakes by looking one endpoint at a time, so looking at energy, waste water treatment or something else but one at a time. I think future lies looking at multiple objectives and try optimizing work with them i.e. we should employ combine approach.

Q. Any message to Life sciences community of India.

Based on my experience i get fair number of enquires from

visiting students. I think training should be very good, most of that training is not based entirely on hands on work, that could be improved but I guess that has already changed.

I was very bad in training, if I would like to hire someone like me I would not hire. But now the students are much better.

