

Sriram Kesarimangalam

I was born and brought up in Coimbatore, Tamil Nadu. I did all my schooling, bachelor (Applied sciences) and master degree (Materials science) in the same city. I got my first exposure to Nanoscience and technology when I went to Indira Gandhi Center for Atomic Research (IGCAR, Kalpakkam) for a 6 month master degree project. I then decided to pursue a PhD in the same field and got the opportunity through Taiwan International Graduate Program (TIGP), an international PhD program run by Academia Sinica, a prestigious research institute in Taiwan. At this point, I was fascinated towards micro- nanofluidics and biophysics and thus joined Prof. Chou Chia-Fu's nanobioscience group (<http://www.phys.sinica.edu.tw/~nanobio/people/chiafuCV/chiafuCV.htm>), where I learnt micro- nanofluidic device fabrication and single molecule biophysics. Since these areas of research were new to me and quite different from my educational background, It took me 8 years to graduate. But, thanks to Prof. Chou's able guidance and support from family and friends, I was able to complete my PhD in September 2014. I then worked as a post-doc in the same lab for a year, to complete some pending projects.

I then moved to Chalmers university, Sweden, where I got a post-doc opportunity with more focus on micro- nanofluidic fabrication and single molecule biophysics towards clinical applications. The group I work with has developed a single molecule optical mapping methodology to study horizontal gene transfer of plasmids carrying antibiotic resistance. Antibiotic resistance is a huge threat to healthcare and we are working on this alternate diagnostic method (in collaboration with medical hospitals) to fight this issue.