

## Perseverance leads Dr Singh to scoop top award



*Dr Dr Patrick Mark Singh receiving his award from the FNU Vice Chancellor, Professor Nigel Healey.*

**H**umble, hard-working and friendly are few of the words that have been used to describe young academic Dr Patrick Mark Singh, winner of the inaugural recipient of Vice Chancellor's Early Career Researcher Award.

Dr Singh doesn't like to be in the limelight much, however his academic achievements have placed him in the spotlight a few times.

The most recent occasion was earlier this month during Fiji National University (FNU) College of Engineering, Science and Technology (CEST) graduation ceremony where he was announced as the winner of the VC's award.

Dr Singh said when a researcher's work is appreciated it creates great satisfaction which boosts morale and provides greater motivation to continue with their research work. After receiving the award, he thanked FNU and extended his acknowledgement to the awards panel that nominated him.

"I was very pleased and felt proud and humble at the same time when the announcement was made," said Dr Singh.

"For a moment I paused to ponder at this recognition that I have been bestowed with and realized that I still need to continue the work, I cannot stop here," he added.

The 31-year-old was recognised for achieving excellence in research as an Early Career Researcher with seven highly ranked journal papers, six best paper awards for conference papers and a H-Index of 6.

Dr Singh, who is originally from Nakasi has made contribution to knowledge in the discipline of Mechanical Engineering.

He graduated with a PhD from the Department of Mechanical Engineering at Mokpo National University in South Korea earlier this year. He attained his Master's degree from the same University in 2014.

His field of specialization is fluid machinery (pumps and turbines) and renewable energy in the areas of energy storage (pump-turbine), wind, wave, tidal energy and hydro turbines (Francis, cross flow, bulb/propeller).

Growing up Dr Singh says he was torn between pursuing a career in medicine

and engineering. According to the Assistant Professor his family and mentors encouraged him to join the medical field while he had a passion for planning, designing and construction of buildings and other structures.

"Architectural works, in the material form of buildings, are often perceived as cultural symbols and as works of art – this was my interest. The sad thing was that it was not offered at undergraduate level which made me take up Bachelor of Engineering Technology (Mechanical/ Manufacturing)," the young academic said.

Dr Singh was fortunate to have secured a scholarship from the Korean Government Scholarship Program to pursue his Master's studies. "My scholarship came with a condition that I must learn Korean language. I studied the language for 2 years."

He describes himself as in between an intermediate and fluent speaker of Korean language. He is able to understand it really well and communicate within reasonable limits.

"During the first year in Korea, I felt like quitting and returning to Fiji. Adapting to the food, language, weather and staying away from home was just too much to cope with. Fortunately, there were other foreign students in my group and we just encouraged and assisted each other in this journey."

Upon completion of his Master's degree and with the support from his Professors, Dr Singh continued with his studies and pursued a PhD in Korea under Woojung Education and Culture Foundation scholarship.

"My family encouraged me to go ahead and complete my doctorate degree. I acknowledge the Fijian Embassy for pointing me towards the Woojung Education and Culture Foundation that is founded by Lee Joong Keun, who offered me a scholarship to further my studies. This Scholarship Foundation offers scholarships to more than 100 students per semester from developing countries to study in Korea."

"I also acknowledge my church pastors in Korea who treated me as their own son and during this time, I also met my better half who was my pillar of strength in difficult times."

Dr Singh commended the relationship between the universities and industries in Korea.

"While we were full time students, we were also involved in several research and development projects with industries which was funded by the government – we were exposed to a lot of engineering work."

One of his most notable achievements is the design of a hydrofoil for tidal current turbines for which he was awarded by the Korean Society of Mechanical Engineers.

He also designed an experimental test rig on a pump-turbine system for energy storage systems for his laboratory work.

"Now, I want to focus on the renewable energy sector and through FNU educate the upcoming generation on the importance and usage of renewable energies that we have readily available in our beautiful country."

"All we have to do is to tap into it in an environmental friendly way where we do not end up exploiting these resources. All the research work that I did in Korea can be applied in Fiji."

It has been almost a year now since his to Fiji after being away for a little over seven and half years.

"I am still trying to adjust to life here but overall my learning journey has been an interesting one and I hope the same continues for the academic career."

In addition to writing scholarly publications and lecturing, Dr Singh enjoys playing soccer and hiking.