

Zagdu Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai*)

(Accredited Programmes by National Board of Accreditation, New Delhi**)

Tel.: 6730 8000 / 8106 / 8107

Fax: 2846 1890

Email: tcet@thakureducation.org

A - Block, Thakur Educational Campus

Kandivali (East), Mumbai - 400 101.

Shyamnarayan Thakur Marg, Thakur Village,

Website: www.tcetmumbai.in • www.thakureducation.org



*Permanent Affiliated UG Programmes: * Computer Engineering * Electronics & Telecommunication Engineering * Information Technology (w.e.f.: A.Y. 2015-16 onwards)

* Electronics Engineering (w.e.f.: A.Y. 2017-18 onwards)

**1st time Accredited UG Programmes: • Computer Engineering • Electronics & Telecommunication Engineering • Information Technology (3 years w.e.f.: 16-09-2011)

**2nd time Accredited UG Programmes: * Computer Engineering * Electronics & Telecommunication Engineering * Information Technology * Electronics Engineering (3 years w.e.f.: 01-07-2016)

LETTER OF RECOMMENDATION

This letter is to strongly support the application of Mr. Raj Oak for higher studies from your prestigious university for the Masters program in Mechanical Engineering. I, Mr. Rupesh Deshbhratar am Assistant Professor at Thakur College of Engineering and Technology affiliated to Mumbai University and his project guide for his ongoing senior year project.

Academically, Raj is ranked amongst the top 15 students in the class of total strength of 80. He has been consistent with his studies and has always shown satisfactory results in his exams.

He is currently working on his senior year project titled "ARANYANI: ENERGY AND WATER GENERATOR". The project basically focuses on providing useful resources like water and energy to the rural areas which are deprived of it. The project consists of a tower which houses a water generating unit inside it and a wind turbine at its top. One of the main feature of the project is that, it is able to produce water for daily consumption from the thin air which combines the WATER GENERATION technology by condensing atmospheric water and generation of electrical energy by his innovatively designed ADAPTABLE BLADELESS DISC WIND TURBINE which uses radical different concept inspired from sails of the ship for energy harvesting through winds.

In the development until now, I am more than happy to see the remarkable work he is putting into the project. His determination and liking towards Mechanical concepts and Energy systems has helped in overcoming every difficulty in the project so far. He has not failed to show great qualities of leadership in managing team work, having patience and ability to constantly improve himself.

He has great hands on working experience in constructing different models as a proof of concept each time he comes up with a new idea as well. The WATER GENERATION system was in fact my brain child and I wanted his team to take it further, but Raj combined it with his unique **Wind Turbine Design** and now the project has gone to a much higher level, this project also got **selected** in the first round of **three national level competitions** for innovation. With great knowledge in core concepts and a good working knowledge in their application I believe that his senior year project is going to be a success.

Finally, Raj is very ambitious and goal driven and I am certain that he will be an outstanding student at your university too. I assure you that he will achieve great heights and hence I whole heartedly recommend him to your university.

Prof. Rupesh Deshbhratar

Asst. Professor-Department Of Mechanical Engineering, Thakur College Of Engineering & Technology, Mumbai

E-mail: rupesh.deshbhratar@thakureducation.org