



## Shri Prasad Vinayak Dudhgaonkar



Shri Prasad Vinayak Dudhgaonkar obtained his Bachelor of Engineering in Mechanical discipline from Shivaji University Kolhapur and Master of Technology in Energy Systems Engineering from Indian Institute of Technology Bombay. Shri Prasad is presently working as Scientist D in Energy and Fresh Water Group in National Institute of Ocean Technology. In NIOT, Prasad is engaged in development of technologies related to harnessing ocean energy forms namely wave energy, kinetic energy in ocean currents and ocean thermal energy conversion (OTEC). In particular, he is responsible for development of various types of turbines required for these energy forms. He has led the design team in developing several computational fluid dynamics (CFD) based models in order to simulate performance wave energy turbines, ocean current turbines, OTEC turbines and floating wave energy devices. He has also guided several post-graduate students in carrying out small scale model testing of floating wave energy devices.

Recently Shri Prasad led a team in successfully carrying out open sea trials on a small ocean current turbine in Andaman. Prasad's team developed all components of this turbine in-house by carrying out extensive CFD studies, laboratory experiments and constant speed seawater channel testing before taking the turbine to open sea. This turbine outperformed the expectations during the sea trials.

Shri Prasad also significantly contributed to development of floating wave energy device backward bent ducted buoy (BBDB) by planning and supervising extensive laboratory testing of wave energy turbines, several open sea trials of BBDB and designing a new turbine for BBDB. BBDB with the new turbine performed well in the subsequent open sea trial off Chennai coast and the Turbine matched BBDB's characteristics very well. The results of the work carried out by Prasad and the team have been presented and appreciated in many national and international conferences.

Apart from the technical work, Prasad is keenly interested in music, travelling, reading and photography.

Shri Prasad Vinayak Dudhgaonkar is awarded Certificate of Merit for his outstanding contributions in the field of Ocean Technology.