



Congratulations to **Dr. Pranay P. Morajkar and Mr. Akshay V. Salkar** for being granted with the award of **Indian Patent** for their invention entitled “**Method for synthesizing tungsten trioxide nanorods**”. While the synthesis of nanostructured materials are largely performed using high pressure autoclave equipment’s and expensive templates which has a significant impact on the cost of production, this innovative synthetic strategy developed indigenously at the **FRL-4 Laboratory of Nanostructured Materials for Energy & Environment, School of Chemical Sciences, Goa University** provides a way to produce tungsten trioxide nanorods using a facile and cost effective method. The method utilizes a novel fuel in dual role wherein it acts as a nanostructure directing agent while simultaneously providing combustion energy for nanostructure formation. The synthesis strategy has been optimized to produce the material in the most economical way possible and has tremendous applications in the field of catalysis, cancer diagnosis, carbon free, alternative energy generation and storage systems such as hybrid batteries and supercapacitors.



[Pranay P. Morajkar](#) received his Ph.D. in 2012 from the University of Lille1 in collaboration with University of Bordeaux1(France) under the guidance of Dr. Christa Fittschen (guide) and Prof. Eric Villenave (co-guide) respectively. He served as a CNRS post-doctoral researcher at the LRGP-ENSIC- University of Lorraine, (France) and as a visiting post-doctoral Research Scientist at the Khalifa University of Science and Technology, (U.A.E). Since 2014, he serves as an Assistant Professor at the School of Chemical Sciences, Goa University wherein his research focuses on designing Nanostructured Materials for Energy and Environmental Applications. He has published 33 research publications in international journals of high impact and reputation such as ACS, RSC, Elsevier, Spinger publications etc., and this is his first research patent in service of Goa University and the state of Goa. His research work has a total impact factor of 203 and h-index of 13, i10 index of 14.



Akshay V. Salkar received a Bachelor of Science degree in 2014 and a Master of Science degree (Physical Chemistry) in 2016 from Goa University, India. Soon after his M.Sc., he joined as a Research Assistant on an Indo-European S&T INNO-INDIGO research project sponsored by DST, India in the research group of Dr. Pranay morajkar.. He is currently pursuing his Ph.D. degree with Dr. Pranay P. Morajkar at the School of Chemical Sciences, Goa University and his research focuses on designing nanostructured materials for energy applications. He has 13 research publications till date with an total impact factor of 60.