





## TIFR BEST THESIS AWARDS 2015-16

These are annual awards, given by the TIFR Alumni Association (TAA), for the Best Theses awarded by TIFR between April 2015 & March 2016  
The names are selected by a committee chosen for each subject ([The committees for 2015-16](#))



### TAA-Geeta Udgaonkar Award for Physical Sciences

	Recipient	Thesis Title	Citation
 (Best Thesis Award)	Dr. Deepak Kumar	Friction Induced Organisation. (Guide : Prof. Shankar Ghosh)	For his work which has excellent experiments down to the single-particle level has uncovered effects underlying friction, adhesion and wear that lead to a pioneering attempt to show the variation of local scale frictional changes on the global scale structuring.
 Honorable Mention	Dr. Rahul Dandekar	Studies in Non-Equilibrium Statistical Physics: Pattern Formation and Absorbing Phase Transitions. (Guide : Prof. Deepak Dhar)	For his work which has obtained path breaking analytical results in the areas of pattern formation and phase transitions in non-equilibrium systems.


TAA – Zita Lobo Memorial Award for Biological Sciences

	Recipient	Thesis Title	Citation
 (Best Thesis Award)	Dr. Jogender Singh	Characterization of the molecular mechanisms of prion protein misfolding and oligomerization. (Guide : Prof. Jayant Udgaonakar)	For his work which has used innovative biophysical and biochemical techniques to probe how the disease-causing prion protein misfolds to form oligomers and fibrils.
 (Honourable Mention)	Dr. Anand Osuri	The effects of rainforest fragmentation on tree communities and aboveground carbon storage in the Western Ghats. (Guide : Prof. Mahesh Sankaran)	For his work which has great clarity demonstrates the impact of human activity on the ecosystem structure of tropical rainforests.


TAA-Harish Chandra Memorial Award for Mathematics

	Recipient	Thesis Title	Citation
 <p>(Best Thesis Award)</p>	Dr. Ananta Kumar Majee	<p>Analytical and Numerical study of stochastic balance laws driven by Levy White noise.</p> <p>(Guide : Prof. Imran Habib Biswas)</p>	<p>For his work which has worked on hyperbolic conservation laws that are perturbed by random forcing, and has made a number of important and deeply inspiring contributions in the study of stochastic balance laws which are driven by Levy noise.</p>
 <p>(Honourable Mention)</p>	Dr. Shalini Bhattacharya	<p>Local Langlands correspondences for GL<sub>2</sub>:Some Applications</p> <p>(Guide : Prof. Eknath Ghate)</p>	<p>For her work which has studied objects attached to cuspidal forms of positive slope. She has determined the Brauer class of the endomorphism algebra of modular motives at primes of infinite slope, and classified the reductions of the local residual Galois representations attached to forms of slope less than two."</p>

TAA – Sasken Award for Computer & Systems Sciences

	Recipient	Thesis Title	Citation
 <p>(Best Thesis Award)</p>	Dr. Bodhayan Roy	<p>Studying Triangulations and Visibility Graphs of Planar Point Sets.</p> <p>(Guide : Prof. Subhir Ghosh)</p>	<p>For his work which shows a polynomial time algorithm to determine if a finite point set in general position in the plane admits a 4-connected triangulation or not and thus settles a longstanding open problem in computational geometry and geometric graph theory.</p>

TAA - Chemistry Award

	Recipient	Thesis Title	Citation
 <p>(Best Thesis Award)</p>	Dr. Debanajan Bhowmik	<p>Change of Protein Conformation and Function associated with amyloid aggregation.</p> <p>(Guide : Prof. Sudipta Maiti)</p>	<p>For his work which has unravelling unique structural features in the oligomeric species of amyloid beta peptides which can explain the toxicity of these species along with the development of surface enhanced Raman spectroscopy for studying amyloid beta-cell membrane interaction.</p>