Nobel Prize winner for Chemistry wants to be a fiction writer

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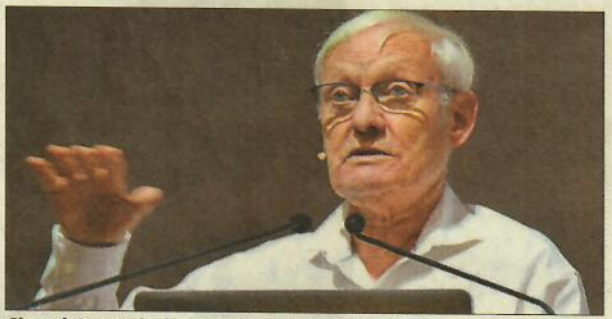
BENGALURU: After decades spent working on structures of complex biomolecules, Nobel Prize winner for Chemistry 2017, Prof Joachim Frank now hopes to add to his achievements by becoming a published fiction writer.

Prof Frank, who is currently a professor of Biochemistry and Molecular Biophysics at Columbia University, New York, gave his first public lecture after winning the Nobel at the International Centre for Theoretical Sciences (ICTS), Hesaraghatta, on Wednesday.

In October, the Royal Swedish Academy of Sciences named Prof Frank, along with Richard Henderson and Jacques Dubochet for the prestigious prize for 'developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution'.



Chemistry Nobel laureate Prof Joachim Frank.

For decades, structures of biomolecules have been observed with the help of a method known as X-ray crystallography. "Based on this, we knew how to target diseases and drugs. But this method has limitations because of which a large number of molecules could not be studied. Many of these molecules can mutate and cause serious illnesses such as cystic fibrosis," Prof Frank told *DH*. Cystic Fibrosis is a life-threatening genetic disorder which affects the lungs and digestive system. "Knowledge of the structure of molecules is crucial to the treatment of the disease. Cryo-electron microscopy can now fill this gap," he said.

The work of the three scientists is said to have brought in a new era in biochemistry, as researchers can observe biomolecules in great detail and the knowledge can be used to develop treatments for diseases. Prof Frank's interest in electron microscopes (EM) was sparked off by his very first mentor, Dr Ernst Kinder, who observed butterfly wings under an EM to discover that, at the microscopic-level, it was actually colourless. The wings got their colour from an optical effect. "It is fascinating that when you take something macroscopic and then go closer and closer, you see whole new realities and new worlds," Prof Frank said.

Prof Frank has an interest in fiction writing and his short stories have been published on several platforms. He has three unpublished books and with the interest generated from the Nobel win, he hopes to get at least one of them published. "There has been interest from several quarters and I hope to have at least one published. It is about scientists and the contrast between personal experiences and professional challenges," he said.