wire is not really necessary, but only our inability to disperse with it compels us to use it' (CW-8, p. 162). Tapas Datta pointed out that Maxwell showed, in 1864, the theoretical possibility of propagation of electromagnetic waves through a vacuum, though wireless transmission was discovered only later.

Vivekananda used the laws of conservation in physics to discuss vedantic cosmology and to prove his point against creationism. He also used the biological sciences to put forth his views. Tapas Dattta drew attention to the fact that while Vivekananda accepted Darwin's evolutionary theory, he noted, 'The two causes of evolution advanced by the moderns, viz. sexual selection and survival of the fittest are inadequate. Suppose human knowledge to have advanced so much as to eliminate competition, both from the function of acquiring physical sustenance and of acquiring a mate, then according to the moderns, human progress will stop and the race will die.' The theory of 'involution' is offered by Vivekananda, as a better explanation. In his introduction to Raja Yoga, Vivekananda used physiology to explain the nervous system and plexuses; he also used physiology in the idea of senses and sensing.

To make clear the logical flow in Vivekananda's speeches, Tapas Datta used a flowchart. Vivekananda asked a common question such as 'How or why absolute has become finite?' and went through a sequence of different viewpoints, hypothesis, inference, different paths of logic and conclusion, with clarifications where needed. He also started new thoughts such as 'What are time, space, causation?'

In his conclusion, Tapas Datta said, 'Vivekananda missed, by his untimely death in 1902, most of the revolutionary developments of the 20th–21st centuries which he could have used to his advantage. But he anticipated some of them – by stroke of his genius – to discuss religious and philosophical issues in terms of scientific ones.' On the interconnectedness of the Universe, Vivekananda noted that 'one atom in this universe cannot move without dragging the whole world along with it' (CW-3, p. 269). Tapas Datta pointed out that Vivekananda had recreated vedanta using science and if he were here now, he would have taken great pleasure in the findings of science.

1. *The Hindu*, 14 January 2010.

Geethanjali Monto (S. Ramaseshan Fellow) lives at D-215, D-type Apartments, Indian Institute of Science, Bangalore 560 012, India.
e-mail: geethum@hotmail.com