Editorial

V Rajaraman, Chief Editor

In this issue we feature Kurt Gödel one of the greatest logicians of the twentieth century. In 1931 he published his famous result known as the incompleteness theorem. As Vijay Chandru points out in his article he showed that the axiomatic method of deductive reasoning has certain inherent limitations. In particular he proved that even the ordinary arithmetic of integers can never be fully axiomatized. Given any consistent set of arithmetical axioms, there are statements in arithmetic that are true but cannot be derived from the axioms. He also proved what is known as the completeness theorem of first-order predicate calculus. Srivastava explains in the Article-in-a-Box, the genesis of Gödel's work and a brief look at his life and times. The completeness theorem is discussed in detail in a two part article by Srivastava, the first one appearing in this issue.

Shankar and Shylaja tell us how to observe the night sky as a prelude to the planned publication of a star chart each month beginning from the August issue. The star chart will appear in the inside back cover. The suggestion to publish star chart came from one of our young readers and we trust this will kindle the interest of many more readers to watch the night sky. The series on microscale experiments in chemistry by Kelkar and Dhavale concludes with methods of organic qualitative analysis. Sikdar describes the research on slow signal transduction mechanisms in the neurons which won Carlsson, Greengard and Kandel the Nobel Prize in 2000. Electric car was in the news in June with the launch of Reva by a company in Bangalore. The heart of an electric car is efficient rechargeable batteries described by Shukla and Martha. We have as usual variety of other articles – on climate change, pollution and Singapore's BirdPark.

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Happy reading!