Editorial

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In the editorial of January (2012) issue of *Resonance* I wrote on the way scientists work and science progresses. Scientists should never be afraid to of questioning even the most accepted tenets of science, but of course have to be very careful of doing so in the public. I also wrote of the experiments that found that there are neutrinos that travel faster than light, which violated current thinking in physics. It has now been realized that this is an experimental artifact caused by communication problems between the computer used to measure the speed of neutrinos with the GPS unit. This has lead to the resignation of two of the top leaders of the team that made the report. As this issue of *Resonance* goes to print, there is another equally remarkable report authored by Masud Mansuripur, which is yet to appear in the reputed journal, *Physical Review Letters*. The Lorentz law of force gives the force acting on a charged particle in the presence of electric and magnetic fields. It is described in all textbooks on electromagnetism and is considered to be one of the pillars of classical electrodynamics. The paper claims to provide indisputable argument that this law is in incompatible with special relativity. The paper is yet to appear, but has already been commented upon by Adrian Cho, in one of the most important journals, *Science* (Vol. 336, 404). Mansuripur suggests that the law may be replaced by another one proposed by Einstein and Laub long ago, but later on repudiated. Very heated discussions seem to be certain before the matter is conclusively settled.

Two articles in this issue of *Resonance* cover the life and work of Wilhelm Ostwald, one of the most famous chemists. He was responsible for establishing physical chemistry as a respectable area of chemistry. He did work on a variety of topics, that include the theory of electrolytic dissociation, homogeneous and heterogeneous catalysis.

T Padmanabhan continues his series 'Dawn of Science' in an article in which he describes how the use of wood as a fuel and the consequent deforestation of England lead to the discovery of the steam engine. On June 5/6 a rare event will happen in the sky. On these days, the Venus, the Sun and the Earth will be in a straight line, with Venus in the middle, causing us to see (warning: do not look at the Sun directly!) it as a black spot on the Sun. As this is a very unique event, this issue has two articles devoted to it. The one by Shylaja explains what the event is, and why it is infrequent and gives the history of observations. The other one, by Rathnasree and Kaur describes an easy-to-make equipment for its observations. We hope our young readers will construct the equipment and view the transit of Venus.