

# Editorial

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*C S Yogananda, Associate Editor*

Science in India is facing a problem: there are not too many takers. This problem is faced by some of the other countries of the world but there is a difference – the few they get seem to be very good while the few we get, barring a very small fraction, seem to be there since they have no other choice. Though there has been an increasing awareness of the problems concerning science education in India, the real problem does not seem to have been addressed. One of the chief drawbacks is that our education is very rigidly compartmentalised. If you take up physics or mathematics in BSc you cannot study biology and vice versa; engineering colleges and medical colleges are separate from colleges awarding BScs. The ‘science content’ of the engineering/medical courses is rather meagre; physics and chemistry last only for the first two semesters while mathematics, a little luckier but only in engineering courses, survives for one or two more semesters; ‘science’ students have no knowledge of practical applications of what they study. Medicine is totally cut off from all other subjects. Also, if you take up engineering or medicine you will not be studying any languages. This lacuna is one of the *reasons for existence* of *Resonance*, where we aim to present science without labels. A very good example of this is the previous (October, 2001) issue where entropy is looked at from various subject view points. The present issue celebrates Sadi Carnot, an engineer who discovered the second law of thermodynamics which led to the concept of entropy. You will find an absorbing account of Carnot’s brief life (he was only 36 when he died) and work in J Srinivasan’s article.



In school we are introduced to logarithms via the definition ‘that number to which the base must be raised so as to equal the given number.’ And when we start studying calculus we treat logarithm as a function without much explanation. Same is the case with the exponential function and trigonometric functions. The article on transcendental functions by Nowroji and Muniyasamy bridges this gap.

With electric cars hitting the road, the article by A K Shukla should make for very interesting reading. There are other interesting articles and usual features which, we hope, will keep you busy till the next issue of *Resonance* comes along!

