Editorial*

N Sathyamurthy, Chief Editor

Every issue of *Resonance* is special to us as we try to highlight the life and contributions of a late scientist. We try to reproduce a classic paper by the featuring scientist and point out what is special about that paper.

In this context, we are happy to focus our attention on the contributions of one of the greatest physical chemists of the 20th century in this issue – G N Lewis. G N Lewis's scientific career started with a renewed interest in thermodynamics and its applications to chemistry. More than that, he gave the first precise definition of a chemical bond, which used to be represented by a mysterious line without revealing what it really meant. Lewis helped demystify that line and helped interpret it in terms of a pair of electrons shared by the two atoms concerned. The significance of his definition of a chemical bond is discussed in the Article-in-a-Box in this issue. What was remarkable was that the definition was propounded before quantum mechanics and the Pauli exclusion principle were discovered.

Lewis's scientific interests went beyond the boundaries of chemistry. R Nityananda highlights the work of Lewis on the special theory of relativity for nearly a decade in this issue. Incidentally, Lewis gave the name 'photon' to the light 'particle'.

Despite his monumental contributions to chemistry, Lewis missed out on the Nobel Prize on more than one count, and he was bitter about it. That a scientist is also a human being becomes obvious when one reads about the man.

This issue of *Resonance* is also special because it gives an account of the face-to-face interaction with Professor C N R Rao,

Email:

nsathyamurthy@gmail.com

*DOI: <https://doi.org/10.1007/s12045-019-0831-3>

an outstanding chemist, who celebrates G N Lewis as one of his heroes. An octogenarian, Rao has a clear message to the students of all disciplines: doggedness and tenacity in pursuit of one's goal is the mantra for success.

We are grateful to Professor Raghavendra Gadagkar for continuing with his series of articles, after a gap of a few issues. We have several other articles of interest to the readers in mathematics, physics, chemistry and biology, including articles on Birch and Benkeser reductions, interesting consequences of Furstenberg topology, and finding Planck's constant from glowing LED light besides a book review. We hope that the readers would enjoy reading them and let us know what they think of them.