The increased number of citation studies, and the various purposes for which such studies are being carried out in recent years, add much substance to Dr. Norman Kaplan's observation that the lowly footnote citation has been elevated to a position of considerable importance, not only for information retrieval explicitly, but as an important tool in historical and sociological research [1]. Taking the sociological aspect, i.e., the social system of science, it is now an accepted riot that a scientist should not make the final decision as to how good his own work is, he should be interested in others' responses to his work, for without them, he cannot come to an accurate evaluation of his own work [2]. One way to get and measure this response is, surely, to count the citations one gets in others' work. The more favourable and competent response a scientist gets from his peers the 'richer' he becomes in the scientific community. One reliable way to measure the most competent response to a scientist's work would, perhaps, be the study of citations in the Nobel lectures. In other words, it may be assumed that those whose works are cited in the Nobel lectures could be taken as the 'richest' members of the scientific community with significant contributions to their credit.

Taking this as the norm of measurement and running through the volumes of Nobel Lectures in Physics (1901-62), Chemistry (1901-62), and Medicine (1922-62), published by the Elsevier Publishing Co., [3], we get the following picture so far as the Indian scientists are concerned.

**Indian Scientists Cited By/And On**

**Physics**

- Bhagavantam, S
- Krishnamurti, P
- Krishnan, K S
- Ramanathan, K R
- Ramaswamy, C
- Ramdas, L A
- Rao, K S
- Rao Ramachandra
- Rao Ramakrishna
- Sogani, C M
- Srivastava, B N
- Venkateswaran, S

Cited by C. V. Raman in his Nobel lecture (1930) on "The molecular scattering of light".
| **Bhabha, H J** | (1) Cited by PMS Blackett in his Nobel lecture (1948) on "Cloud chamber researches in nuclear physics and cosmic radiation".  
(2) Cited by H. Yukawa in his Nobel lecture (1949) on "Meson theory in its developments". |
(2) Cited by H. Yukawa in his Nobel lecture (1949) on "Meson theory in its developments". |
| **Raman, C V** | Cited by A. H. Compton in his Nobel lecture (1927) on "X-rays as a branch of optics". |
| **Roy, S C** | Cited by O. W. Richardson in his Nobel lecture (1928) on "Thermionic phenomena and the laws which govern them". |
| **Sengupta, R L** | Cited by P. M. S. Blackett in his Nobel lecture (1948) on "Cloud chamber researches in nuclear physics and cosmic radiation". |
| **Saha, M N** | Cited by W. H. Nernst in his Nobel lecture (1920) on "Studies in chemical thermodynamics". |
| **Raman, C V** | Cited by P. Debye in his Nobel lecture (1936) on "Methods to determine the electrical and geometrical structure of molecules". |
| **Chakravarti, R N** | Cited by Robert Robinson in his Nobel lecture (1947) on "Some polycyclic natural products". |
| **Ray, J N** | [worked with the Nobel Laureate] |
| **Raychaudhuri, S P** | [worked with the Nobel Laureate] |

It can be seen from the above table that only 21 Indian scientists were cited in Nobel lectures – 12 of them by the Indian Nobel Laureate Sir C V Raman, in Physics, Chemistry, and Medicine from 1901 to 1962. The earliest to be cited, during this period, was M N Saha in 1920 lecture and the latest Indian cited was S N Bose in 1949 lecture. Sir C V Raman, Professor S N Bose, Dr H J Bhabha have all been cited twice during this period. In other words they are the 'richest' Indian scientists.

### References