The present issue is devoted mainly to some major questions on Muslim predicament in science and technology. While the questions raised are similar, the answers provided are different. Zaki Yinnani, in his editorial, finds an obvious ‘paucity of resources and lack of adequate knowhow’ as one of the factors. On further analysis, he finds that although Islamic ethos and Qur'anic perspective, provided a congenial environment for the flourishing of science and technology in the past, yet it has failed to elicit response among Muslims in the present. He concludes that the writing on the wall is clear: science itself is to blamed rather than Muslim culture and for science to be internalized into Muslim society it must be reshaped into its Islamic context, before it is given to us. Mere introduction of Western science cannot fill the gap, as no Islamic Nation so far, however westernized it might be, has come on par even with a Korea or Japan, not to speak of the industrial west.

Abdus Salam, on the contrary, does not believe in any defect in Western science and only holds failure in its realization to be responsible for the drawback. He is the greatest protagonist of modern science and finds no incompatibility between Islam and science. His views, coming from a scientist of repute, represent general thinking on the problem among most Muslims today and are a priori basis for introduction of science into Muslim societies.

S.W.A. Husaini joins Salam in putting the question on birth, decline and rebirth of Islamic science, and gives reasons similar to those of Abdus Salam. Both present data to substantiate their statements, and portray the dismal performance by Muslims in this field. Salam presents three indices of this, namely, participation of Muslim visitors to International Centre of Theoretical Physics, Italy (vis a vis their GNP), R&D manpower in Islamic countries (against their population) and net enrolment in education (data from world bank). Some of these data are quite astounding, the net enrolment in 18-23 age group in 2% for Muslim, and 12% for developed countries, same ratio stands for the GNP expenditure, and in manpower the entire Islamic block has 45,000 persons (1983) while USSR alone has half million and Israel 35,000 persons. Husaini has given distribution of countries by percentage in categories of education among Muslim and non-Muslim countries in the years 1960 and 1980 and has shown growth rate indicators of technological development. The poor performance is reflected everywhere.

While Salam and Husaini both agree on Muslim backwardness in modern age, extreme advancement in the medieval period, and future readvancement by allocation of more funds to scientific projects, Husaini differs from Salam on emphasizing Islamic structure of science the measures suggested by Salam long back (1973) have already been implemented by the countries as reflected in the formation of Islamic Science Foundation, Jeddah and Inter-
national Centre for Theoretical Physics, Trieste (Italy) of which Salam is the director. Everyone is really moved by Salam's concern for Muslim backwardness in modern science. Salam probably would like to relegate all theological, metaphysical or philosophical questions concerning present day science to the backyard and emphasize Qur'an's affinity for science, i.e., tafakkur (or reflection), taskhir (mastery of Nature through technology); Prophet's use of Khandaq (first in Arabia) and manjamis (to reduce Khayber); the rich traditions of Al-Ghazali, Ibn Sina, Ibn Haytham, al-Bayumi, Ibn Khaldun, al-Kindi, al-Farabi, and of tolerance shown by our Caliphs by welcoming scholars from rival empires. He is not oblivious of the limitations of modern science, yet he distinguishes its methods from metaphysics. To him what constitutes self consistency of physical theories is nothing but Lord's design of profundity for the believers and deistic irrelevance for the agnostics.

A volley of questions have also been raised by S. Kocabas, a logician of repute, on some of the philosophical questions of language, theory, grammer and methodologies in modern sciences. Starting from some basic premises that a system of explanation in a language is based on beliefs which can't be explained, he has shown the fallacy of logical positivism and dialectical materialism. The structure of scientific explanation has drastically changed from a causal to probabilistic, relativistic and indeterministic one which have badly haunted materialistic explanations. He goes on to classify sciences like formal (logic, mathematics, grammer), theoretical (physics, chemistry, biology, sociology), and experimental ones (history, geography, cosmography) and gives downward and upward limitations of science. He gives three possible types of changes in scientific method: developments in logical, mathematical and formal structures: development in observational tools, and finally grammatical changes. The latter, according to him, was the type of change when Heisenberg's principle of uncertainty was discovered and even Einstein was sceptical of it. He has discussed problems of truth in language, especially as done by Russell, Carnap, Popper etc. Tracing the contributions of Wittgenstein, Popper and other logical positivists, he comes to Thomas Kuhn who introduced the concept of paradigm to eliminate grammatical complication of truth and falsehood of scientific theories. (His structure of scientific revolution is a classic). Later questions of Kocabas are like provocations, viz. are all phenomena explainable, is ultimate explanation mathematical or can science claim objectivity? Etc.

Perhaps related to the theoretical questions is another treatise 'What Islamic Science is not' by M.A. Anees who has shown a purist and isolationist stand on Islamic science, to the chagrin of Salam. His write-up is replete with various connotations as big science, official science, anti-science, non-science, pseudoscience which have been used in different senses by science philosophers to glorify ultimately Western science as the sole custodian of truth. He judges the claim of Western Science as universal, value free, rational, immutable and futuristic, and rejects them on the basis of parochialism, arrogant corporality, elitism, meaninglessness, artificiality, alienation, stubborness, wastefulness and irrelevance, in fact, prone even to sexism (Goldberg) and racism (Jensen). Search for alternatives, therefore, has led to Islamic science; however, an unfortunate victim of confusion and misconceptions even at the hand of its proponents. He refutes some of the characterizations of Islamic science as Islamized, revealed (Bucailism), cultish (astrology, alchemy, occult, gnosis, metaphysics as per Nasr) or reductive science, rather it has its own epistemology and
methodology at variance with its Western counterpart. He is a fierce critic of Islamization of science, as a subspecies of scientific macroparadigm, but places science as a sub-species of Islamic macroparadigm. The limitation of reductionism is highlighted by emergency of cross-disciplinary subjects, like biophysics, biochemistry, psychobiology, whereas holistic design of Tawhīd gives us polymathy, an integrated view of knowledge. He has summarized the differences between Islamic and Western science on ten points which will go a long way in dispelling many wrong notions prevalent among people about Islamic science. Salam’s staunch Western view can be seen here in dire contrast, but perhaps Salam would not agree on an Islamic science at all.

M.R. Kirmeni formulates some of the basic concepts of Islamic science on its production and administration plane, namely Tawhīd, ‘Ibādah, Khilāfah, (the two from Riddah) and Ākhīrāt. Related to these, he argues, are concept of ‘Ilm, Ḥalāl, Ḥaram, ‘Adl, Zulm, Istislah, A basic concept of Taqwā collecting all the notions given above is also called for. Man–society–Nature relations in Islamic science basically rest on four elements; human need is based on human nature, Nature shows cosmic equilibrium, human intervention is involuntary (biological) and voluntary (goal oriented) both and there is tolerance limit to any disturbance in Nature. Therefore, the principle of naturality is the working production paradigm preferring natural steps to artificial ones, and there has to be a list of preferences in technology. The same rules apply to administration plane, in the direction, planning, and regulation activity as well, using educational and research microparadigms.

Two more write-ups call for conceptual issues. ‘A Thought on Reductionism’ by Rais Ahmad traces the genesis, growth and limitation of the concept of reductionism as a tool of science and points out its inadequacy to explain emergent phenomena, particularly in bio–and social sciences. The concept of holism and systems approach is more akin to developing a unified world view and should be considered for linking value systems with scientific methodology. Reductionism can be retained where it is required but it should not be regarded as an exclusive method. Salim Rashid’s correspondence, highlights Christianity as a supplier of some values to science in the West and its fruitful impact on scientific revolution. Though open to criticism, yet it should provide us with a one to attempt a comparative study of Islamic cultural factors.

The Islamic theory of ecology and Islamic theory of psychology have been discussed respectively by M.K. Rahman and Farshidfar, and in each, better ground for beneficial studies for mankind has been shown. The editorial has done wisely by bringing out a bibliography on S.H. Nasr, one of the most forceful authorities on Islamic science, in order to help people working on the author.