

## Editorial

It is no exaggeration to say that no other age has been so fortunate as to witness such astounding developments taking place all around, particularly in the field of science and technology. Recent discoveries and breakthroughs are bringing about not just a quantitative but even a qualitative transformation in the scope and role of science. In the early seventeenth century Francis Bacon, one of the Founding Fathers of modern science, had set “mastery over nature” as the aim of science. Few in his time, and even later, took him seriously, and his ambition was forced to linger as a mere dream. But today, thanks to the astronomical growth of science and technology, Bacon’s dream is turning true; today humans seem to be on the threshold of staking a claim for a say in the destiny of humankind, if not of the universe itself. Revolutionary transformations are taking place all around us, developments that can chart and steer the course of our destiny. No serious person can be a passive onlooker in this process unfolding before us. Everyone has to be an informed, active and responsible participant in this process. *Omega*’s primary mission is to accompany you in this process by acquainting you with the essentials of these developments, by assisting you to pose pertinent queries and seek sound answers, especially in the context of the deep insights of our religious traditions.

In this issue of *Omega* we are happy to share a few flashes of the current scientific findings in cosmology, biotechnology and stem cell research, chaos theory and philosophical theology, along with some important personal reflections by national and international scholars. However, the bright glow of the present should not blind us to the achievements of the past, particularly of our own past Indian tradition which has something valuable to offer us today. This has prompted us to

bring an important paper on Ayurveda, the age-old medical tradition of India, which is fast gaining its well-deserved attention and recognition worldwide.

In his paper “Ayurveda: A Holistic Treatment Born of a Holistic Vision” K. U. Chacko points out that Ayurveda’s attention is focused more on the totality of the person of the patient than on his/her particular disease. When carried out successfully this strategy ensures lasting and wholesome health, rather than a temporary relief from the discomforts. The paper discusses the scientific, philosophical, religious and cultural roots of this time-tested system of Indian medicine.

No one contests science’s ability to enlighten us about the mode of operation of natural activities. But can this same science enlighten us on the mode of divine action? In the past the answer would have been an unhesitating “no.” But today many scholars have ventured to answer “yes.” After all, if God is the author of the “Book of Nature,” then science that helps us best to understand the activities of this Book should help us also to comprehend the activities of its Author.<sup>1</sup> William Stoeger of Vatican Observatory in his paper “The Emergence of Novelty in the Universe and Divine Action” shares his insights on divine action on the basis of his reflection on cosmology, quantum theory, etc., particularly through a detailed study of the phenomenon of emergence.

From time immemorial chaos has been condemned as the cause of confusion and catastrophe. However, developments in contemporary science have exposed the myth of this belief, as in the case of many other tradition-certified myths. Today it is becoming clear that this traditional pessimism about chaos arose more from our ignorance than from our information about the real state of affairs. Chaos was blacklisted because we were under the illusion that everything in the universe had to be determinate and definite, open to analysis by strictly linear methods. Once again nature has frustrated human hopes and expectations; once again nature has shown herself to be smarter and subtler than humans. Recent developments in science, coupled with the unprecedented analytical capability of computers, have shown that chaotic systems are highly fertile and productive. In fact, in some ways, they map the real world better than the neat, deterministic systems. Kuruvilla

Pandikattu in his paper “The Theory of Chaos: Scientific Openness and Religious Commitment” shares with us some of the surprises about the phenomenon of chaos. He not only explains the scientific dimension of the chaos theory but also exposes some of its religious and social implications.

The waves of the qualitative change emerging in the role and scope of contemporary science are best noticed in the biological sciences, particularly in the genetic revolution. Thanks to these developments, today science can touch us not only from without but also from within; it can shape not only what we have and want to have, but also what we are and want to be. This new role makes the products of the genetic revolution highly valuable for scientific use and, at the same time, frighteningly vulnerable to scientific misuse. No wonder this area is witnessing heated debates and controversies worldwide. Stem cell research, especially embryonic germ cell research, is at the centre of this whirlpool of controversy, since these cells are very versatile and can give rise to multiple tissues and undergo cell division indefinitely. John Britto in his paper “Stem Cell Research: Some Ethical Considerations” first familiarizes the readers with the basic concepts about the nature and functioning of this important part of living organisms, and then discusses the advantages of its good use and the dangers of its misuse.

Continuing along the same theme, C.S. Paulose in his short contribution “Biotechnology and Society: Some Recent Scientific Approaches” discusses both the blessings and risks the genetic revolution entails. He points out that the use of any form of the “slippery slope” argument to block the progress of serious, responsible research in genetic engineering and related fields is tantamount to “throwing out the baby with the bath.” In his view what is needed is a careful, prudential and effective monitoring of the developments and their application on the basis of sound, balanced and progressive ethical principles.

Although science-religion dialogue has come a long way, even today many look upon science and theology as the “twain that shall never meet.” Many contemporary scholars contest this claim and argue that critical realism can be a meeting point between the two. Kees van Kooten Niekerk in his paper “Critical Realism in Science and Theology”

studies this issue in considerable detail and arrives at the conclusion that serious differences between the two systems render any strong form of theological realism unfeasible. However, he advocates a weak form of theological realism, particularly its faith-dependent form.

The challenges and opportunities the developments in contemporary science offer to religion and related systems are many and varied. This issue of *Omega* is bringing you only a few flashes of this explosion of ideas, which we hope will serve as beacons beckoning you, our learned patrons and readers, to engage in serious and creative dialogue between contemporary science and religion.

Job Kozhamthadam,  
Jnana-Deepa Vidyapeeth, Pune.

1. See *Omega*, Volume 2, Number 1, June 2003.