planation for several solar-system phenomena. Carlos Perelman (one of the editors) recounts at great length the difficulties that he has had in posting his articles on the open electronic archives, while M. Apostol describes the difficulties encountered by scientists in Romania.

Several articles in the book are of a more general nature, with their common theme being criticism of the establishment for organized neglect of innovative ideas, which go against the prevailing fashion and establishment thinking. It is clear that these problems do exist in science, as in all forms of organized activity, but it is difficult to say what the remedy should be. There are some suggestions made in various essays, and several are listed in a systematic manner like the one by D. Rabounski. Many of these involve measures which may be viewed as impractical by the establishment, like the exhortation that everyone who wishes to do scientific work should have the basic right to publish and be heard in conferences, without the interference of an onerous refereeing system. It is not clear how one would then handle the nearly infinite number of requests for publication and speaking time that would then arise, how one would separate signal from noise in the bedlam, and how the effort would get funded. One suggestion which has been made in the book is that the youngest people in an institution should have the responsibility to generate ideas and problems, since they would have the freshest approach, while their senior colleagues should occupy themselves with the routine calculations and processing, which are normally left to the graduate student.

One could ask whether it would be indeed be practical to set aside sometime at least for non-conventional ideas in every meeting, and some space for them in research publications. But then surely there would be overwhelming demand for making contributions through these channels, and some regulation would be necessary to decide who speaks and who writes, and on what subject, and this would best be done through anonymous refereeing by people chosen from those with non-conventional views. Needless to say, we would then be back to square one.

The book should be read by everyone working in science, to become acquainted with the anguish that some people feel at the way they have been treated by the scientific establishment, and their

outrage at being denied the opportunity to publish their ideas and have them criticized or accepted in a normal way. It is possible that readers may find in these thoughts echoes of the dissatisfaction which they may have felt from time to time, even while working within the system. Or better still, some may be promp-

ted to ponder over the injustice they may have meted out to those in their charge.

AJIT KEMBHAVI

Inter-University Centre for Astronomy and Astrophysics, Pune 411 007, India e-mail: akk@iucaa.ernet.in



The Chennai Snake Park Trust (CSPT) has brought out a slim book for laymen entitled *Snakebite: A Book for India* (July 2008, Occas. Pap. No. 4). The author B. Vijayaraghavan is the Chairman of CSPT. At the very outset, there is a disclaimer that the views expressed in the book are those of the author himself and not of the CSPT.

The book is informative and is composed of 12 chapters dealing with all aspects of this fascinating yet awesome reptile.

In the very first chapter the author explains why he felt the need for writing such a book – he feels that herpetologists who have a professional interest in the study of snakes, do not know enough. What a vast majority of us know about snakes is usually a bundle of unfounded beliefs inculcated from childhood and handed down from generation to generation as 'received wisdom', myths, superstitions, folklore, grandma's tales and so on.

Snakes have from the earliest times of the human race, evoked a profound sense of wonder bordering on reverence and unspeakable fear in us. Their habit of silently appearing in unexpected places and disappearing equally suddenly; their ability to move at great speed despite being limbless; their unblinking hypnotic stare; their forked tongue darting back and forth menacingly; their ability to hear in spite of having no earholes; the capacity of some snakes like the python to swallow whole animals larger than themselves; their habit of shedding skin periodically and emerging to a new life, as it were, every time; their presence in all types of terrain on earth and in all kinds of climates; their ability to go without food for months on end; their 'psychosexual' body imagery – all have been a source of wonder, bewilderment and awe. And more than anything else, fear! Irrespective of age, it is a very rare person who does not shudder at the word 'snake'. The paradox about snakes appears to lie in the way people perceive them. On the one hand, they invoke fear and hatred and on the other, they are worshipped across the world and held in awe and respect. No other reptile combines so much within it. No other animal can lay claim to such appealing contrariness.

A substantial number of deaths and long-lasting complications or life-long disabilities caused by snakebite could be avoided by some knowledge of the precautions against snakebite and its proper mode of treatment. Even though snakebite has been viewed with the greatest dread from the time our earliest hominid ancestors reared up on their hindlegs more than five and a half million years ago, we do not to this day, have a decidedly safe and totally reliable protocol for treatment of snakebite. Preacautions against snakebite and first aid are discussed exhaustively in an exclusive chapter in this book.

Other chapters deal with various topics. One defends the snake and states that it is not an enemy of humans. 'Kill the snake!': this very much sums up the ordinary person's reaction when a snake crosses his or her path. Other chapters are on the principal venomous snakes of India and how to recognize them, an annexure for a rough identification of the major kinds of venomous and non-venomous snakes of India, and a checklist of the poisonous snakes of India, including an erratum to it. An entire chapter is devoted to snake venom and venom apparatus, symptoms of snakebite, traditional cures for snakebite and antivenin. The final chapter is for the attention of the authorities and targeted audience in the government and outside.

This book priced reasonably at Rs 65 has 96 pages and includes a reference list of other books that herpetologists might want to refer.

Shantha Nair e-mail: snair@ias.ernet.in