From the Editor's Desk March 2008

This first issue of *The South African Optometrist* for 2008 is appearing quite late due to various reasons including a recent change in journal publisher. The journal has also had a make-over and we hope you will find the new style appealing. But, you will also find a whole lot of new ideas or concepts in this issue. Modern optometry is evolving rapidly and many of the old or common ideas and thinking about the eye and the visual system is changing. Understanding, and the analysis of, refractive state or of the optical system of the eye are two concepts that require radically different approaches to that when I was a student studying optometry a few moons back! Optometry students today are learning a whole new language in terms of their interpretation and explanation of how vision and the eye functions. Added to this greater need to understand and use more sophisticated mathematical ideas or models are also a much greater emphasis of many fields such as biochemistry and microbiology. Today the optometrist also requires a much better knowledge of mathematics, physics and pathology and to a much greater extent the optometrist of the future will need to be a very different creature to that even of today. Strange new terms such as Hamiltonian vector spaces, transferences and exponential-logarithmic means are gradually becoming part and parcel of standard or garden-variety optometry and ophthalmology also will be affected in due course. Exciting new technologies such as optical coherence tomography, multifocal electroretinography, 3-dimensional ultrasonography and wave-front aberrometry are being increasingly used in the education of optometry students and some of these technologies or approaches will enhance our diagnostic capabilities very dramatically. Increasingly we can expect to see that the scientific literature in optometry will become more sophisticated and the intellectual demands on readers will increase. These technologies will also allow us to get a much improved awareness of the very complicated nature of brain function and its relations to vision. New methods will become available to measure many different vision abilities such as the eye's sensitivity to light intensity. So, new and exciting approaches to objective measurement of, for example, the visual field will become possible. One can expect that optometry and opthalmology will become much more sophisticated in terms of measurement of many areas such as involving eye movements or vision perception, for example.

Other exciting developments include the establishment of new optometry educational programmes in various parts of Africa and a report in this issue of the journal documents events in Ethiopia where not one but two new programmes in optometry have recently begun. We wish them all the best in getting their new optometry courses going. There are still very few countries in Africa that have formal educational courses in optometry but things are gradually developing. And, South Africa and other African countries where optometry is more established are attempting to make some contributions

towards assisting such programmes where possible. Departments of Optometry in South Africa also are increasingly getting undergraduate and postgraduate students from other African states and hopefully some of these people will become founders or the nucleus of new courses in their home countries. Additionally, they will perhaps contribute towards improving primary eye care services and access in some parts of Africa. Despite the often pessimistic views of many and the sometimes serious problems in various parts of Africa, many African economies are growing fast and gradual or often more noticeable changes towards better eye and health care are occurring in many different regions of Africa.

The growth of education in optometry in South Africa is also expanding and readers will be aware of many opportunities to enhance one's knowledge and skills in various fields within optometry. Many courses or sources of education are already available and some are being developed or expanded and optometric or vision-related conferences and seminars are becoming more common. So, most people in our field should be able to easily find new and stimulating activities to make their experiences and activities in optometry more meaningful and enjoyable and this should contribute towards happier and more satisfied patients in clinical practices. This journal also has one of its aims as being to provide material to its readership that is intellectually stimulating and where possible at the cutting edge of optometric and vision science. The journal is also a historic record of the nature and quality of optometry within South Africa, from the theoretical, research and clinical perspectives. But the journal also requires its readers to be involved and to define the contents of the journal. So, we always welcome any comments or suggestions and especially appreciate receiving manuscripts and papers that may contribute towards the objectives of *The South African Optometrist*.

Congratulations to Dr Graeme MacKenzie (now of the University of Oxford, United Kingdom) for recently receiving the JL Saks Award for a paper entitled *An Introduction to the Mathematics of Ocular Kinematics*. This paper (which is available online) is an excellent example of what the journal would like to achieve in terms of assisting readers towards a more complete or sophisticated understanding of specific issues involving optometry and, in this specific instance, the focus was an introduction to modern science concerning eye movements.

Alan Rubin
Editor
Department of Optometry
University of Johannesburg