



## EDITORIAL

### Gradient Index (GRIN) Optics of the human eye: Contributions of Professor Carlos Gómez-Reino Carnota



### Óptica gradiente de índice (GRIN) del ojo humano: contribuciones del profesor Carlos Gómez-Reino Carnota

M.T. Flores-Arias\*, C. Bao-Varela

*University of Santiago de Compostela, Spain*

In the present issue of Journal of Optometry, the reader will find a paper describing a new approach to derive the contributions of the Gradient Index of the crystalline lens to the optical quality of the human eye. This is just an example of the seeds left by Professor Gómez-Reino in the field of Optics and Optometry.

It is difficult to summarize in a few lines the life and career of Carlos Gómez-Reino Carnota (1946–2012). Carlos was born the 1st of September 1946 in Pontevedra, Spain. He left this town when he was one year old moving to Madrid with his family. He graduated in Physics from the Universidad Complutense de Madrid (UCM) in 1968, obtaining a PhD in Physics (receiving a special award of PhD) from the same university in 1975. He joined the Department of Optics of the UCM, headed in that moment by Professor Armando Durán Miranda, one of the pioneers of researching in Optics and Vision in our country. During the 1970s and with a group of young researchers, scholars and teachers among whom was his wife, Maria Victoria Perez Martin (USC Professor, died the 22nd of May 2010), Carlos began to improve and upgrade the

optics lab, opening new researching lines on holography and interferometry.

In 1979, the couple Carlos-M. Victoria moved to the University of Santiago de Compostela (USC). At that time there was not in the Physics section any group devoted to the field of Optics. During his early years spent in Santiago, they launched the first Optics laboratory for students and began to develop a research laboratory on Optics. Their efforts are now reflected in a front row research laboratory. His main areas of research were: GRIN optics, zone plates, physiological optics, spatial and temporal Optics, Laser Treatment of materials, being principal investigator on research projects nationally and internationally. As a researcher was really bright, as evidenced by the more than a hundred publications in international journals, a book titled "Gradient Index Optics: Fundamentals and Applications" published by Springer-Verlag in 2002, several book chapters and patents. His excellence in research was recognized by the Optical Society of America who appointed him OSA Fellow for his contribution to the progress in Optics. He was member of national and international scientific associations as SEDO, OSA and SPIE. He belonged to the leaders that promoted the establishment of the series of Spanish National Meeting on Optics (RNO), and organized the second meeting of the series in 1990. Carlos held important management positions, in July 1989; he was appointed Director of the Professional School of Ophthalmic Optics and Acoustics Audiometric USC in order to carry out the transformation of the Professional School in School University. A year later,

DOI of original article:

<http://dx.doi.org/10.1016/j.optom.2014.09.003>

\* Corresponding author at: Universidade de Santiago de Compostela, Applied Physics, Facultade de Optica y Optometría, Campus Vida, Santiago de Compostela 15782, Spain. Tel.: +34 881813502; fax: +34 881813642.

E-mail address: [maite.flores@usc.es](mailto:maite.flores@usc.es) (M.T. Flores-Arias).

<http://dx.doi.org/10.1016/j.optom.2015.03.004>

1888-4296/© 2015 Spanish General Council of Optometry. Published by Elsevier España, S.L.U. All rights reserved.

because of his strength and determination, he managed to create the first School of Optics and Optometry in Spain, nowadays Faculty of Optics and Optometry. From 1994 to 1998 he was Vice-Chancellor of the USC. He was the representative of the Spanish ICO Territorial Committee during the period 2001–2004 and was member of the Spanish Royal Society of Physics and member of its Editorial Council. In the last years, he collaborated with several quality agencies for the assessment of the excellence of teaching staff and Spanish degrees (ANECA; AGAE; AVAP). In recognition of his research, he received several awards. Posthumously, Carlos was awarded with the gold medal of the “Colegio

Nacional de Ópticos-Optometristas” for his contributions to the advancement of optics and optometry in Spain.

Carlos was a friendly person with great hobbies like reading, listening music, swimming and sailing. Dear Carlos, we all owe you our sincere thanks for all you have taught us. You will always be in our memories. For all of us that worked with him throughout his life, we have lost a colleague, a friend, someone we trusted completely and who gave us the opportunity to start our careers in the world of teaching and researching, in short, a true master. For the whole Spanish optics community, has passed away a part of the history of the Optics and Optometry in Spain.