

**Statements of Maria L. Calvo  
For the candidacy to the ICO Bureau  
Secretary**

In 1948, when ICO was founded, the world was living in quite a different scenario. The industrialized countries initiated a strong impulse for activating new industries, new technologies and, all in all, a new quality of life. These social and political circumstances reflected on the development of Science and Technology. The field of Optics and Photonics was not an exception, and for decades our community has benefited from an enormous expansion, producing academic, industrial and scientific contributions of great quality and feasibility. Statistics are confirming that there was an increasing enlargement in areas related to Laser Applications, Material Sciences, Optical Communications and Information Technology and many others involving interdisciplinary fields as Nano-Technology, Biomedicine, Spatial Optics, Atmospheric Optics, to give a few clear examples. To assess these facts I shall mention that in the last decade of the XX Century, the economical world growth added, annually, more than  $10^{13}$  millions of dollars to the global economy and in this amount Optics and Photonics industries had their own percentage of participation.

Since the last ICO-18 meeting held in San Francisco in 1999 many events have happened in our world and some of them have certainly produced a great impact in our society. The tragedy of the 11 September 2001 and the following consequences have given rise to an additional pressure on our own concern to face the challenge we have for the near future.

We have our own part of responsibility for creating a sustained world and on this task we have to collaborate more than to compete. In 2002, the prestigious Worldwatch Institute has published an annual report indicating the current evolution of Science toward new actions, in view, for example, of the change climate and confirming a wider agreement for alternative energetic technologies, as solar energy. New proposals are expected for detection and solutions are needed for various problems as water and air pollution. Other aspects of our society have to be considered. We also have to work for education and training of young people who live in the XXI Century. At present,  $3 \times 10^9$  inhabitants of our planet are below 25 years old, and a great effort of our institutions in many professional areas is demanded to motivate a percentage, even if small, of this population to become well trained professionals in their future carriers.

While presenting this resume as my statement for the candidacy of the Secretary of the ICO Bureau, I do not intent to show a dark picture of our common fields, but on the contrary, I would like to clearly state that the Optics community is in an incredibly good position for affording the challenges of our new world and more than that, to succeed on their efforts. Previous ICO secretaries have done a remarkable work. I would just like to be a part, even if modest, of this program, which I would wish to continue and extend. ICO, as an international commission associate to IUPAP, and with more than fifty years of experience, can provide the necessary coverage for helping and supporting the future actions in the many fields of Optics and Photonics, toward a new sustained and developed society.

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Maria L. Calvo