

Croatian Association »Albert Einstein«: Medical Perspective

Božo Vojniković¹

¹ Board of Directors of Croatian Association for Protection of Non Ionizing Radiation, Rijeka-Zagreb, Croatia

Croatian Association for Protection of Non-Ionizing radiation (CAPNIR) is established in 2005, in the International Year of Physics and Albert Einstein. The basic intention of the CAPNIR is to propagate Einstein's contribution in physics, Theory of Relativity and his humanities. The association CAPNIR uses the name of Albert Einstein because the famous Einstein's formula:

$$E = N_A \frac{hc}{\lambda}$$

explains the fundamental theory of photochemical reactions.

In the years 2005-2006 the association CAPNIR organized two expert meetings and the 1st Croatian Congress, about the influence of non-ionizing radiation on eyes and skin, with the conclusion: according to cumulative biological effect of non-ionizing radiation of sunlight, it is necessary to protect the children in the earlier time, carrying on the »Opatija Declaration – 2006« as the completion of the United Nations Environment Program and UNICEF World declaration about the children protection from the environmental effects of ozone depletion. Opatija Declaration and its activities are the part of program Vision 2020 – THE RIGHT TO SIGHT.



Memorial-tablet to ALBERT EINSTEIN.

Unveiled in the year 2006 – Hotel Grand, Opatija, Croatia, that indicates the opening of the 1st Congress of the "Albert Einstein" Association.

**CROATIAN ASSOCIATION FOR PROTECTION OF
NON IONIZING RADIATION (CAPNIR) »ALBERT EINSTEIN«**

OPATIJA DECLARATION – 2006.

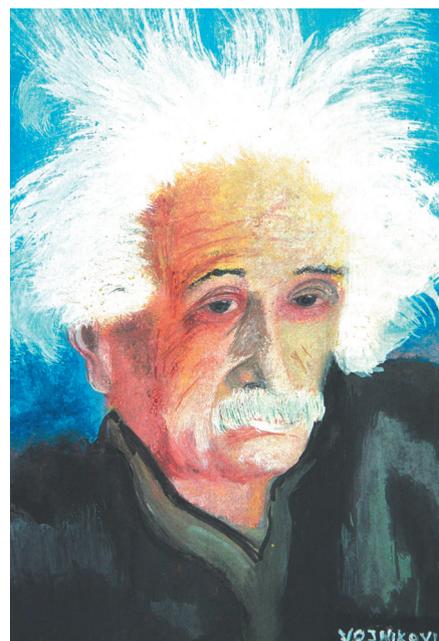
The First International Congress of Croatian Association for Protection of Non Ionizing Radiation, with the title: »INFLUENCE OF NON IONIZING RADIATION ON EYES & SKIN« and the main topic: »MACULAR DEGENERATION & SKIN CANCER« was held in Hotel Grand, Opatija, 15th – 17th September 2006.

The experts on this Congress concluded:

1. AMD-Age-Related Macular Degeneration is one of the leading factors of vision loss today in the world and the earliest symptoms appear before the age of 50.
2. One of the leading risk factor in the development of AMD are climate factors, environmental influences, ozone losses, and consequently increasing of UVA & UVB, that lead to serious damage in retinal tissue.
3. Because of cumulative effect of UV radiation, especially in chronic exposures to sun light and solarium, children acquire 50 to 70% of the total lifetime doses of UV energy.
4. In the future, next decades, dramatic increase of the AMD population is expected For example, it is expected about 50 million population of AMD patients in the next 50 years in Europe. Today newborns appertain to this future population.
5. In our experiments it is proven that subthreshold doses of UVB and UVA in common influence irradiation is damaging for retina.
6. For this reason, for the future reduction of AMD population, we must protect the children!

HOW?

- A. keep the children out of the strong sun light from 10 a.m. to 3 p.m.,
 - B. protect the children eyes with UV filtering lenses and Medical transmission of visible light.
7. Supplementation treatment with A vitamin, beta-caroten, lutein and antioxidants in children doses, during months with higher UVA and UVB solar radiation, depending on geographical latitude.
 8. Children protection from harmful UV solar radiation is presented as the urgent world problem, and must be National Health Problem.



ALBERT EINSTEIN (1879 – 1955)

One of the greatest physicists in the world.

$$\text{Einstein-unit: } E = N_A \frac{hc}{\lambda}$$

The famous formula which explains the fundamental of photochemical reactions.