Editorial

Nicolas Foray

Institut National de la Santé et de la Recherche Médicale, INSERM CR-U1052, Radiobiology Group, Cancer Research Centre of Lyon, 28 Rue Laennec, 69008 Lyon, France Email: nicolas.foray@inserm.fr

In the frame of the 25th anniversary of the Chernobyl accident, the *International Journal of Low Radiation* should favour the diffusion of a number of papers dealing with the clinical and societal consequences of this event, classified by the International Nuclear and Radiological Events Scale of the International Atomic Energy Agency as the most severe nuclear accident. Obviously, a number of meetings have been organised and our Journal, in its next issues, will regularly inform readers about the new advances in the various research areas concerned with the Chernobyl accident (radiobiology, ecotoxicology, epidemiology, etc...). However, this anniversary is marked during the management of another nuclear event, the Fukushima accident, which permits us to compare and better evaluate the biological, clinical, societal and economic consequences of these two accidents. Particularly, while the radioactivity due to ¹³¹I can be now considered as negligible for both, the same concerns due to nuclear wastes, food controls and biological effects of ¹³⁷Cs and other long-life fission products are focusing the attention of scientists.

There were a number of false rumours and much misinformation about the consequences of the Chernobyl accident, notably about the numbers of deaths and radiation-induced cancers. For example, from UNSCEAR sources, between 1991 and 2005, 6848 thyroid cancers have been observed in children who were under 18 in 1986. Without underestimating the familial dramas, 'only' 15 deaths were recorded among all these cancers that were treatable while some non-governmental organisations claimed extraordinary numbers. Hence, with 25 years of experience and experiments, the sanitary consequences of the Fukushima accident may be better evaluated, free of any catastrophism: may scientists be able to work in more quiet conditions?

In addition to the evaluation of the impact of ¹³⁷Cs and other long-life fission products that are still the direct radiobiological consequences of both accidents, the non-radiation effects must be now evoked to better analyse the whole mid- and long-term hazards for exposed populations. Hence, the impressive review by A.N. Koterov and A.P. Biryukov about the anomalies and pathologies in the offspring of liquidators of Chernobyl accident that may be caused by non-radiation factors takes an exceptionally large place in this issue.