In Memoriam Professor Cesare Maltoni (1930–2001)

Cesare Maltoni, a world-renowned

leader in the research of the hazards of industrial carcinogens in the workplace, died on 22 January 2001 at the age of 70. Maltoni's contributions to research and the causation of cancers dealt with the carcinogenesis of many compounds such as vinyl chloride, vinylidene chloride, methylene chloride, trichloroethylene, acrylonitrile, benzene, gasoline, alkylbenzenes, oxygenated additives of gasoline such as methyl *tert*-butyl ether and ethyl *tert*-butyl ether, pesticides, asbestos, man-made mineral fibers, zeolites (natural and man-made), gamma radiation, and electromagnetic fields. He published results of over 198 long-term carcinogenic studies, and he was the first to demonstrate that vinyl chloride is a carcinogenic agent that produces tumors of the liver

and angiosarcomas. He was the first to demonstrate that benzene is a powerful, multipotential carcinogenic chemical. Maltoni's studies led to governmental regulations that resulted in saving workers' lives.

Maltoni was born in Faenza (Ravenna), Italy, on 17 November 1930. In 1954–1955, he received his M.D. degree from the University of Bologna, Bologna, Italy. The title of his experimental thesis was "Changes in the Dermis during Experimental Skin Carcinogenesis." Maltoni had a long and distinguished career. From 1957 to 1958, he was a fellow at the Curie Foundation in Paris. From 1959 to 1961, Maltoni was a research associate at the Department of Cancer Research, Michael Reese Hospital and Medical Center, in Chicago, Illinois. In 1962, he was a professor of general pathology, and from 1966, he was a professor of experimental oncology.

Maltoni worked with Enrico C. Vigliani from 1961 to 1964 as a consultant at the Clinic for Occupational Disease of the University of Milan. From 1964 to 1967, he was the director of the Institute of Oncology of Bologna. From 1966 to 1989, Maltoni was the director of the Bologna Centre for the Prevention and Detection of Tumours and Oncological Research. He was also scientific director of the European Foundation of Oncology and Environmental Sciences "B. Ramazzini." His scientific appointments and positions were numerous. Among his honored positions were:

- Secretary general of the Collegium Ramazzini, an international academy consisting of 180 members who are experts on the relationship between cancer development, environment, work, and health
- Past president and honorary president of the Italian Society for Tumor Prevention, Diagnosis and Therapy
- Past chairman of the International Committee for Human Tumour Investigation
- Member of the Italian National Board of Health (1984-1989)
- Member of the Académie Internationale de Lutece
- Member of the Académie Européenne des Sciences, des Arts et des Lettres
- Member of the National Technical Scientific Commission for Biosafety for Evaluation of Potential Health Risk from genetically modified organisms, Italian Ministry of the Environment



• National chairman of the Environmental and Occupational Carcinogenesis Committee set up in 2000 by the Italian League for the Fight against Cancer.

Maltoni authored and co-authored more than 700 original scientific publications and numerous books and proceedings in the national and international literature, and was editor and co-editor of many journals.

For his work, Maltoni was recognized with many awards, including

- The Golden Medal "Faentino Lonatano" of the town of Faenza (Faenza, Italy, 1974)
- The International Award for Cancer Prevention of the Italian League for the Fight against Cancer of Latina (Latina, Italy, 1994)
- The Stokinger Award of the American Conference of Governmental Industrial Hygienists (Kansas City, MO, USA, 1995)
- The International Award "B. Ramazzini" of the Collegium Ramazzini (Washington, DC, USA, 1995)
- The International I.J. Selikoff Memorial Award (Washington, DC, USA, 1995)
- The Sigillum Magnum of the University of Bologna (Bologna, Italy, 1997)
- The Golden Medal of the Italian Society of Tumours Prevention, Diagnosis, and Therapy (Bologna, Italy, 2000).

Maltoni was a true friend of working men and women. The effect of his lifetime work and achievements place him in a very small and select group of world scholars such as Ramazzini and Hippocrates. Not only was Maltoni one of the greatest experimental oncologists but he was also a doctor who made important medical and oncological research contributions. Most importantly, he was also a teacher who practiced Ramazzini's philosophy that "it is better to prevent than to cure." Maltoni's vision and dedication to making a safer environment and workplace is a tremendous inspiration for present and future scientists to follow to improve human health.

Many of us fellow Ramazzinians, his co-workers, wish to be considered as his "always family friends" and to remember happy moments when we were together. We will remember Cesare Maltoni's devotion of his life, his energy, and his love of saving lives for the betterment of mankind. He was a man of great stature and many contributions, and he will never be forgotten.

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