In memoriam

PROFESSOR DE LEY, an eminent Belgian microbiologist, passed away on 16 November 1997. Born in 1924 in Gent, Jozef De Ley studied chemistry at the State University of Gent. He obtained a PhD degree in 1949 and the Aggregate for Higher Education in 1958, with a fundamental contribution on novel aspects of the oxidative metabolism of carbohydrates by micro-organisms. Jozef De Ley performed research at the laboratory of A. I. Virtanen (Helsinki, Finland), the Microbiology Laboratory (A. J. Kluyver) in Delft, The Netherlands, and the Department of Bacteriology (M. Doudoroff) at the University of California at Berkeley, USA. He was the founder of the Laboratory of Microbiology at the Faculty of Sciences of the University of Gent, where research initially focused mainly on comparative aspects of bacterial metabolism, leading to the discovery of new enzymes, metabolites and pathways. In 1961, a half-year sabbatical visit to the Department of Microbiology at the University of Illinois in Urbana, USA, stimulated him and some staff members in Gent to start investigations on the genomic relationships of various groups of Gram-negative bacteria. This was carried out with the aid of molecular techniques such as DNA-DNA hybridization and determination of G+C content of genomic DNA. The optimization and standardization of the DNA-rRNA hybridization technique, emphasizing $T_{m(e)}$ as the relevant taxonomic parameter, were the start of a comprehensive phylogenetic study of the *Proteobacteria*, resulting in numerous publications (e.g. in the *International Journal of Systematic Bacteriology*) and a growing scientific recognition. The collaboration and contact with Peter Sneath's group (Leicester, UK) led to the introduction of numerical treatment of microbiological data in Gent, where De Ley advocated

Jozef De Ley
1924–1997

the polyphasic approach in bacterial taxonomy.

Jozef De Ley was visiting professor at many foreign universities and was frequently invited to speak at international congresses and symposia. He was also a member of several taxonomic subcommittees of the International Committee on Systematic Bacteriology.

The numerous bacterial strains that were investigated in De Ley's laboratory were carefully preserved by lyophilization and formed the basis of a public service bacterial culture collection, nowadays operating under the acronym BCCMTM/LMG.

De Ley and his team made numerous contributions to the international literature on bacterial biochemistry and taxonomy. The genus *Deleya* and the species *Sulfurospirillum deleyianum* were named after him. In the 1984 edition of the taxonomic 'bible', *Bergey's Manual of Systematic Bacteriology*, De Ley was co-author of the chapters on the genera *Acetobacter*, *Agrobacterium*, *Alcaligenes*, *Frateuria*, *Gluconobacter* and *Zy-*

momonas. He was also author or co-author of a number of chapters in the second edition of a four-volume standard work, *The Prokaryotes*.

De Ley received the Bergey Award in 1985 and the C.B. van Niel International Prize 1990–1994 for his numerous contributions to bacterial systematics. He retired in 1989.

Jozef De Ley was highly energetic and determined; he was a hard-working and conscientious scientist and teacher, who stimulated many Belgian and foreign PhD students. He devoted the greater part of his lifetime to microbiology. The microbiological community will remember Jozef De Ley as one of the pioneers of modern microbial taxonomy.

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