Our Memories of Dr. Donald G. Miller

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Published online: 28 January 2014 © Springer Science+Business Media New York 2014

The present special issue is a tribute to Don's scientific work to which many scientists have contributed because of their direct knowledge of him or because his work has influenced their work. We would like to express our thanks and appreciation for their priceless help.

Don Miller has been without any doubt one of the great scientist in the area of matter diffusion and in the general field of irreversible thermodynamics. We met him in the beginning of the 1980s during his first trip to Naples. In 1983 Prof. Vitagliano Vincenzo invited Don to the Chemistry Department of the University of Naples to give a short course on irreversible thermodynamics. At that time Roberto Sartorio was a young professor of physical chemistry and Luigi Paduano was an undergraduate student. That was the first time we met Don. Probably neither of us was aware at that time that this event would affect our lives deeply. In 1986 both of us were invited by Don to Lawrence Livermore National Laboratory for a short research period. This was Roberto Sartorio's first foreign experience and Luigi Paduano had just graduated. We both started that long trip with great expectations and enthusiasm. We were going to work with a scientist who worked with the pioneers of diffusion such as Prof. Louis Gosting and Hiroshi Fujita! That period was fundamental in our lives; it was one of our most fulfilling and intense experiences from both scientific and human points of view. Our friendship with Don grew and this also happened among us, and this was central for the future work we have produced in the field of matter diffusion. In the same period we also had the pleasure to meet Dr. Joseph A. Rard and Prof. John G. Albright.

We both remember Don's stories about the scientists who pioneered the matter diffusion field that he was so interested in, and how he visited the people who in the earlier years had contributed to this field in order to collect notes for his history of diffusion that is presented in this issue in his honor.

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After 1986 we had a close collaboration not only with Don, but also with Joseph Rard and John Albright and we had the chance to better know each other. Don visited us several times in Italy and every time there was a renewed pleasure in our collaboration. In about 20 years of collaboration we have published 18 papers with Don as coauthor and each of them was a great pleasure because of the harmony that had been created among us and to which Don made great contributions.

Although this special issue is a scientific contribution honoring Don, we would also like to spend some time to commemorate the man. Don was a person with many interests and high curiosity. He was involved in politics for his desire to be part of his community and even paid attention to the political developments in other countries. We both remember the many questions he raised and discussed with us on the political system in Italy and our domestic politics during those years.

When we were in Livermore Don invited us to concerts. He loved music and, among the different kind of music, ragtime was probably his favorite. He wrote three compositions, also listed in his scientific curriculum vitae, and we remember listening to him play them when we were invited for dinner at Miriam and Don's house. Our favorite composition of his was "Nostalgia Rag".

We have memories of several other pleasing moments. We remember his affection for western movies and, in particular, a lunch time spent talking about the old movie "Stagecoach" with John Wayne as a star.

We are grateful to Don for his friendship and his life lessons. Dear Don, it was an honor for us to join you for a while on your way.

Roberto Sartorio and Luigi (Gino) Paduano

1 Remarks by Vincenzo Vitagliano who Proposed that Don Miller's "The History of Interferometry for Measuring Diffusion Coefficients" be Included in this Special Issue

I met personally Donald G. Miller in the 1960s when he was touring Europe and came to Naples. After that we continued a personal friendship and a profitable scientific collaboration for more than 40 years. He invited me to Livermore for a research project and I invited him to Naples as visiting professor. He was in Naples several times collaborating with me and all participants of my research group.

On 1999, in occasion of my 70th birthday Don Miller was invited by the Italian Chemical Society at the XXth meeting of the Italian Association of Physical Chemistry in Florence to give a main lecture in a special section dedicated to "Diffusion in Liquid Systems".

The lecture dealt with the history of interferometry for measuring diffusion coefficients and was greatly appreciated by the audience. A revised text of this lecture was published on 2007 in the Acts of the Neapolitan Academy of Physical and Mathematical Sciences as an introduction to a review paper dealing with the research on diffusion done in Naples.

Taking into account the limited circulation of the Neapolitan Academy journal I have proposed that the Journal of Solution Chemistry reprints this text as a tribute to the memory of Donald G. Miller. In my opinion the subject of this paper is of notable interest and worthy to be published again in a Journal of international distribution.

Vincenzo Vitagliano

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