
Editorial

A Tribute to George Zografi: Four Decades of Cutting-Edge Research in Interfacial Phenomena

I am honored to introduce this special issue of *Pharmaceutical Research* as a tribute to Professor George Zografi, who has devoted over four decades to understand the behavior of molecules at interfaces. I wish to congratulate the co-editors, Dr. Paul Bummer at the University of Kentucky and Dr. Mehran Yazdanian at Cephalon Inc., for their superb team work in securing high quality contributions from top-notch scientists. This issue has a wealth of innovative concepts and methodologies that can be applied to the design, fabrication, and characterization of drug delivery systems, including those based on nanotechnology.

In my interview with Professor Zografi in 1999 (1), he credited his success to the interactions (oftentimes spontaneous) he has had with his colleagues both in and outside his research laboratory. In that interview, he also talked about the individuals who most influenced his academic career, the turning point in his research career, and the key to fostering successful collaborative relationships. To me, Professor Zografi's success is the product of synergy of his unique traits:

1. His passion in understanding the fundamentals in a systematic, comprehensive manner,
2. His courage in tackling challenging research questions,
3. His wisdom in choosing the path to travel in the research jungle,
4. His rigor in scrutinizing his own thinking and his own work,
5. His willingness to share ideas with scientific contemporaries while reaching out to strangers in the research arena to form collaborative partnerships,
6. His gift in inspiring others to do their very best, and
7. His total devotion to the intellectual and personal growth of his students and colleagues.

I suspect the seven traits just mentioned also guided Professor Zografi in the management of other aspects of his distinguished professional career, including 5 years as Dean of the School of Pharmacy at the University of Wisconsin. Professor Zografi is known for his punctuality. This is a hallmark of someone who is goal-oriented, disciplined, and well-organized. As one of the graduate students who were fortunate to be there when Professor Zografi was dean, I can vouch that Dean Zografi remained intellectually engaged despite his demanding administrative duties. He never lost sight of his intellectual compass. It is remarkable that the decade post-ship turned out to be the golden era of his research career. This was the period in which his perpetual curiosity brought him to the interface of vapor and solid, spawning a myriad of collaborative research activities of fundamental importance to

the engineering of formulations of complex molecules with demanding delivery profiles in today's therapeutics. Many papers in this special issue have captured this particular dimension of Professor Zografi's influence in the pharmaceutical sciences in the twenty-first century. In my opinion, Professor Zografi is one of the leaders in modernizing pharmaceutical technology, which is characterized by integrating fundamental concepts, rather than by reiterating empiricism, in approaching formulation design.

Professor Zografi's preference for a systematic, comprehensive approach to science is reflected well in the depth of his papers and, not surprisingly, the frequency these papers are cited. Over 30% of his publications are cited at least 30 times, and several are cited more than 100 times. He has published widely, 25% of his publications are featured in *Pharmaceutical Research*, including 4 of his top 10 most cited papers (2–5). On the subject of selecting which journal to publish his work, Professor Zografi felt that "...As an applied science area, pharmaceutical science should be using the best basic science possible to create its own 'cutting edge' research, and that is what should be presented in the pharmaceutical sciences forum."

For the record, Professor Zografi played no role in selecting *Pharmaceutical Research* as a forum to host this special issue. In fact, he was not even made aware of this special issue until the evening of June 10, 2006, at the banquet celebrating his distinguished career. His former graduate students and postdoctoral students made the journal selection. It so happened that, at about the same time as the initial inquiry was made, the editorial team of *Pharmaceutical Research* had just endorsed the concept of creating special issues, when warranted. The editorial team considers special issues not only as a means to draw attention to topics of importance in translating basic discoveries to medicine, but also as an additional avenue for active involvement by members of the pharmaceutical community in shaping their journal.

It was indeed a pleasure to work with Drs. Bummer and Yazdanian over the past 12 months on this special issue. In addition, I wish to thank all the authors for being on time and for adhering to the high standards known for *Pharmaceutical Research*. I am confident that this special issue will spur future paradigm-shifting research in formulation science and engineering. I am optimistic about the outcome, in light of the synergy to be gained through a growing number of collaborations with engineers, mathematicians, and information technologists recently. In Professor Zografi's own words (1), "Mutual respect, open give and take, similar standards of operating, and total dedication to the issues studied, without excessive concern for who gets the credit, seem to be paramount to a successful collaboration".

On behalf of the *Pharmaceutical Research* community, I thank Professor George Zografi for his strong support of our journal and for his tireless effort on behalf of pharmaceutical education and pharmaceutical sciences. Please join me in wishing him and his wife good health and happiness as they begin a new chapter to contemplate the next interface.

Vincent H. L. Lee
Editor-in-Chief, Pharmaceutical Research

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