Habib Firouzabadi
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It is a great honor for me as the associate editor of the *Journal of Iranian Chemical Society (JICS)* to be the guest editor of this special issue. This issue of *JICS* is dedicated to the admired Iranian scientist, our distinguished scholar Professor Habib Firouzabadi for his outstanding achievements and great contributions to the development of organic chemistry in Iran, on the occasion of his 65th birthday and also his honorable retirement.

I would like to thank the Editor-in-Chief, Professor Mojtaba Shamsipur and the Board of Editors of the *Journal of the Iranian Chemical Society* for their rewarding decision to acknowledge the pioneer scientists of the country. Special acknowledgment is due the colleagues and former students of Professor Firouzabadi who have contributed research articles and a review in this issue of *JICS* in his honor.

N. Iranpoor
Editor

Foreword

I am honored and pleased to write this introduction on the occasion of the 65th birthday and retirement celebration of my friend and colleague, Professor Habib Firouzabadi. I would like to thank Professor Iranpoor of Shiraz University and The Board of Editors of the *Journal of the Iranian Chemical Society* for giving me the opportunity to write this foreword dedicated to the life and accomplishments of our esteemed Iranian scholar, Professor Firouzabadi. I would like to also thank the former students and colleagues of Professor Firouzabadi who have contributed research articles in this issue of JICS in his honor.

In the fall of 1967, I started my academic career at Pahlavi University (now Shiraz University) as an associate professor of chemistry when I visited Habib as a graduate student.

Habib was an extremely positive and hard-working student and did everything with passion including his mountain hiking. After receiving his B.S. degree in the fall of 1967, Habib decided to begin his M.S. studies in the department. I was delighted when Habib asked me if he could do his M.S. thesis research with me. By then, through the courses that he had taken with me, I knew him as a capable and hard-working student with interest and devotion to the field of chemistry. His research project was on the synthesis of alkyl and aryl thiosulfenimides and their use as potential prevulcanization inhibitors (PVI) in the rubber industry. This project was a continuation of previous work in which I was involved at the Monsanto Chemical Company on the synthesis of sulfenimides, of which one alkyl derivative had become commercialized as a potent PVI in the tire industry. In 1968, obtaining chemicals for research in Iran was not easy. We ordered the necessary starting materials from Aldrich Chemical Company and at the same time to be sure that Habib would have some starting materials for his research, I asked my father-in-law, Dr. Newell Cook at the General Electric Research Laboratories to send me the chemicals by mail. Fortunately, the chemicals sent by Dr. Cook arrived quickly and Habib's research was completed in a year. Toward the end of Habib's work, the chemicals from Aldrich finally arrived but as our famous poet, Shahryar says, it was "Nooshdaroo Baad Az Marge Sohrab".

I believe Habib was the first recipient of an M.S. degree from Pahlavi University. This of course, is only a small distinction among his many outstanding achievements. His M.S. research data were appeared as an article in the *J. Chem. Soc.* in 1971. Dr. Firouzabadi received his Ph.D. degree in organic chemistry from the University of Pennsylvania in 1974, under the mentorship of Professor Michael P. Cava, an internationally known distinguished synthetic chemist. Upon returning to Iran, Habib served as an assistant professor at both Pahlavi and

Kerman Universities. He continued his joint appointment as a faculty member of both universities until 1983, when he decided to give his full attention to teaching and research at Shiraz University as a full professor. During his tenure at Shiraz University, Professor Firozabadi's level of scholarly activity in research and training of students has been anything but miraculous. I, for one am amazed at the number of Ph.D. and M.S. students that he has trained (over 60), and the number of excellent research articles (over 230) that bear his name and have appeared in various prestigious international journals. He has done this in spite of very limited resources for research and other obstacles some of which were the result of an 8 year war with Iraq and economic sanctions.

Despite all the difficulties, Dr. Firozabadi's contribution to the field of organic chemistry and the quality of his research and findings has been exceptional. His novel synthetic methodologies in aqueous, non-aqueous media as well as non-solvent organic reactions and a variety of new reagents and catalysts have been used worldwide as the *Science Citation Index* indicates. There are over 2700 citations of his work for the period of 1988 to 2008. He is by far the most cited scientist in Iran. When you look at the 23 volumes of *Fieser & Fieser's Reagents for Organic Synthesis*, the most used series by the world chemistry laboratories, you find over 25 references to Habib Firouzabadi and his co-workers' publications describing a variety of methodologies and the use of specific reagents and catalysts in organic synthesis. You find examples of redox reagents selective for the mild transformation of only one function in the presence of a variety of other groups. Also, you will find excellent methods and reagents for C-C bond formation, transformation of groups such as alcohols or carbonyl to other functions or use of mild reagents for protection or deprotection of groups. In 1978 in a publication in *Tetrahedron Letter*, Dr. Firouzabadi was the first to report the use of barium manganate as an efficient oxidant for high yield conversion of alcohols to aldehydes or ketones in dichloromethane at ambient temperatures. This article was highlighted in 1978 by *Chemistry and Industry* of London and another research paper published by him in the 1984 *Synth. Comm.* was selected in 1985 by the Silver Institute of Washington D.C. to be among the 1200 best papers worldwide describing the application of silver compounds. His 1997 *Synth. Comm.* article describes the use of the metalloporphyrin 5,10,15,20-Tetraphenyl-21H,23H-porphiniron(III) chloride as an effective catalyst for the silylation of hydroxyl groups with hexamethyldisilazane. This catalyst is now offered by the Aldrich Chemical Company for purchase. In addition to numerous research papers, Professor Firouzabadi had been invited to write and contribute a total of 7 featured articles, review and book chapters in a number of prestigious publications. For example, he contributed five topics in the "Encyclopedia of Reagents for Organic Synthesis", Edit. L. A. Paquett, John Wiley, 1995; a feature article on "Nitrogen and Phosphorus Complexes of Zinc Tetrahydroborate as Stable, Efficient and Versatile Reducing Agents" in *Alembic*, Morton

International Inc., USA, 1998; and was an invited author of a chapter in *Science of Synthesis* on "Deprotection of Dithioacetals" in Houben-Weyl Methods of Molecular Transformation (SOS), 2007, 30, 505-581. Dr. Firouzabadi also wrote an invited article on "Reactions of Epoxides and Episulfides with Electrophilic Halogens", *Tetrahedron*, 2002, 58, 7037. He has also contributed two invited review articles to *J. Sulfur Chem.*, 2007, 28, 631-676 on "Reduction of Oxygenated Organosulfur Compounds", and in *Current Organic Chemistry (COC)*, 2008, 12, 233-256 on "Cesium and Aluminum Salts of Dodecatungstophosphoric Acid as Eco-Friendly and Efficient Heterogeneous Catalysts in Organic Synthesis: Some Recent Advances".

For many of his outstanding achievements and contributions to the world of chemistry, Professor Firouzabadi has been honored and recognized by both national and international scientific and professional organizations. He has won numerous awards and distinctions. In 2000, he was elected as a Fellow of the Third World Academy of Sciences (TWAS) and in 2005 he was named as the Chemist of the Year by the Organization of Islamic Conference Committee on Development of Science and Technology. He has been a member of the Iranian Academy of Sciences since 1991 and a member of New York Academy of Sciences since 1995. Dr. Firouzabadi is the first ranked 1992's Awardee of the Kharazmi Prize Laureate in Basic Research as well as an award winner in 2003 as one of the Everlasting Faces of Iran. In 2003, he was selected as the Distinguished Research Professor of the Iran Ministry of Science, Research & Technology and in 1993 and 2002, he was recognized as a Distinguished Professor of Chemistry at Shiraz University. This list is only a part of the awards and distinctions that Dr. Firouzabadi has earned.

Dr. Firouzabadi's love for Iran and his inexhaustible devotion and passion to educate young Iranian men and women is admirable. In 1986-87, he worked with Professor Glass at the University of Arizona as a post-doctoral research fellow and then in 1993-1994 as a visiting research scientist at the American Cyanamid Company. I know that at both of those times he had the opportunity to stay, work and live in the United States but instead he chose to return to Iran and serve.

From 1975 to present, Professor Firouzabadi has worked tirelessly and passionately to educate young Iranians and help develop and establish an infrastructure for basic research in Iran. This can be seen from his longstanding involvement in many aspects of chemical education in Iran. Dr. Firouzabadi started his career in 1975 with a joint appointment at Pahlavi and Kerman Universities. I was a witness to Habib's dedication and the hard work that he invested in the construction of Kerman University as well as the establishment of a fine academic program for that University with the help of its founder, the late Mr. Afzalipour and the university chancellor and vice chancellor, Dr. M. A.

Mirzaei and Dr. A. R. Salajegheh. During his academic career, Dr. Firouzabadi has contributed significantly by serving as a member of editorial boards of several scientific journals including the internationally recognized *Journal of the Iranian Chemical Society* for which he is the editor and one of the founders. He also served as the President and the General Secretary of the Shiraz University Alumni Association (SUAA) in 1999-2001 and served as a member in many national committees dealing with libraries, educational planning, research and publications. Professor Firouzabadi has also served the chemical community of Iran as the president of Iranian Chemical Society for over 8 years in four two year periods.

In science, one of the most important needs for developing countries with limited resources is the ability of researchers to cooperate and collaborate with each other. I believe that Professor Firouzabadi has been a pioneer in this area and selflessly nurtured his young colleagues to flourish and reach their potential. I also, believe that he has set a fine example for other colleagues in other Iranian Institutions to follow. As evidence of this collaborative spirit, are his many fine research articles carrying the names of other colleagues from Shiraz University as well as others from across Iran. Professor Firouzabadi stressed the need for collaborative work when, at the 2005 Malta Conference on “Science for Peace in the Middle East”, he stated “Malta is a great place for the exchange of scientific ideas”, where we need to collaborate internationally rather than “remaining trapped in our part of the world”. Professor Firouzabadi encouraged his fellow scientists at Malta to submit papers to the internationally known *Journal of the Iranian Chemical Society* where he serves as its editor.

In the life of every professor or mentor there are only few students who fulfill the dream of that professor or mentor. I strongly believe that Habib is a rare example of one of those students. As his former teacher, I am proud of his exceptional accomplishment as an outstanding and internationally recognized scholar/teacher and of his unsurpassed contribution to the progress of science education in Iran. It is my sincere hope that Prof. Firouzabadi’s passion, devotion and love for Iran will be a lasting example to be followed by the present and future generations of Iranians.

Sincerely,

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