



## Foreword

## Festschrift for Prof. Şefik Süzer's 60th birthday



## 1. Introduction

I am honored and delighted to serve as the guest editor for this Festschrift issue in honor of Prof. Şefik Süzer's 60th birthday. The scientific content consists of nine papers written by friends, colleagues and students of Prof. Süzer. The core of this Foreword consists of short, personal accounts that were written from a selection of Prof. Süzer's colleagues, students and his son (a Ph.D. student in applied physics). We believe that these are an ideal way of introducing Süzer as a scientist, colleague, teacher, friend, and father. It concludes with a brief biographical note.

## 2. Personal perspectives

2.1. *Ph.D. Advisor, Prof. David A. Shirley, Director Emeritus, Lawrence Berkeley Laboratory, USA*

I remember fondly the early days in Berkeley when he was interviewing for a Ph.D. research director, and how impressed I was by his maturity, his seriousness, and his pleasant personality. He impressed me as a man who had a plan for his career, beginning with a research fellowship from his home country of Turkey and continuing after his doctoral studies by repaying Turkey, contributing to its scientific and educational activities.

His doctoral research proceeded very well, yielding unexpected new discoveries and an unusually strong thesis, and the rest is well

known to you, his colleagues and students. He and I have met a number of times since as his career has progressed, in various venues at conferences and in Bilkent and Berkeley. Barbara and I will always remember the gracious hospitality extended to us by the Süzer's in Istanbul and Bilkent, and especially our trips by motorcar between the two cities.

Please treat Şefik well on his special day: he deserves it. He is not only special to you at this Symposium, but is also well regarded in the outside world. I am very proud to have had a role in his scientific development.

2.2. *A colleague, Prof. Osman Yavuz Ataman, Department of Chemistry, Middle East Technical University, Ankara, Turkey*

Şefik Süzer is my friend and colleague since late sixties when we were students in the Department of Chemistry, Middle East Technical University. I was his senior by 1 year, but we took some courses and relevant laboratory education together. Our department was established in 1960 and we were excited and proud students of this then young university. Şefik was the best student of his class. While he was still an undergraduate student, he was involved in a small research project under the supervision of Professor Kenneth Sauer from University of California, Berkeley. Professor Sauer was visiting our department and was a lecturer for physical chemistry courses in the third grade. We used to see our friend Şefik, carrying some beakers containing samples in this beautiful green color of chlorophyll. This work, supported partly by the United States Agency for International Development (AID), was later published in *Plant Physiology* (Bethesda); I believe this was Şefik's first publication [1].

In those years, our lives were full of chemistry, pains of growing up, love stories, heartaches and politics. We used to work hard. I remember many picnics with classmates at green resorts near Ankara; these were full of joy, songs and a lot of fun.

We came together again in the same department, this time as young faculty staff members in the late seventies. He built his laboratory almost from scratch, designing and personally building many electronic and mechanical equipment for his research; in those years he was mostly concentrated on negative ion mass spectrometry. Our laboratories were in a newly built section of the department; we were working hard not only to form our research area but also to solve the problems related to the infrastructure such as heating, electricity, etc. In these early years in the Middle East Technical University, he designed and taught courses on physical chemistry, spectroscopy and electronics in addition to research in mass spectrometry. We were then both rather newly

married, enjoying the novel presence of the funny little creatures that joined our lives.

Starting early nineties, he joined Bilkent University. Years passed full of teaching and research. In this process Şefik Süzer has become one of the most respected persons in Turkish scientific community as well as having an international fame in his field. Although he describes himself as a physical chemist, we always enjoyed his seminars, research and the knowledge disseminated by him in our field, analytical chemistry. I wish him many years full of happiness and success.

*2.3. A classmate, Prof. Müfit Akınç, Materials Science and Engineering, Iowa State University, USA*

Şefik Süzer is one of the most brilliant alumni of the Chemistry Department at the Middle East Technical University. We were classmates from sophomore year through graduation, and we have remained as best friends for the past 40 years. As his classmate, I remember how Şefik would study much less than most of us, yet earn the highest score on the exams, whether the subject be chemistry, physics, or mathematics. In fact, a physics professor once called him out in class and told him that she wished he would be a physics major. Şefik's response was "I would rather be a chemistry student". Şefik was not only an outstanding student but also a caring friend and team player. He would give of his time to tutor his classmates and help them learn. Yet, outside the classroom, Şefik also knew how to have a good time. He was either a leader or active participant in social events and gatherings on campus.

As a testament to his both technical brilliance and his generous, team-oriented character, Şefik has been a pioneer in international collaboration in his field. Before he was thirty, he had already traveled and worked in four continents! He has also kept close contact with many of his classmates and his colleagues over the years, both professionally and personally. He serves as a role model not only for his students and colleagues but also his friends. Şefik had a profound effect on the careers of many, including myself. I am a better scientist and perhaps a better person for it.

*2.4. The student's perspective—Assist. Prof. Özgür Birer, Department of Chemistry, Koç University, İstanbul, Turkey*

The first time I met Prof. Süzer, it was the freshman orientations. Although I was the only chemistry student present, he took me to his laboratory, showed the good old Kratos and explained the principles of photoelectron spectroscopy. Of course I did not understand much back then, but as a young and eager student I was certainly pleased and honored by his care and interest. At the end of my first year, I was already spending the summer in his laboratory. Little did I know, this was the beginning of a long and educational relationship. I graduated after a senior project in his laboratory and spent another 2 years for my MS degree.

I have always admired his meticulous approach to problems, attention to details and carefully designed experiments. The training I got in his lab certainly has strong influence on my career. I think the most significant example was his regard for simple tasks; simple does not warrant sloppy. In the laboratory, even the simplest task must be completed with utmost care and if you are

not going to do it the right way, then do not bother doing it at all. His advice has always been that the developments in science come in small incremental steps, so if you are expecting something else then you are up for a big disappointment. I watched him with admiration over the years while he worked on several different topics with success demonstrating a practical flexibility few scientists have. He has not only been a caring mentor for me but a role model for life as well.

He has also been a great teacher and a guide. I remember when I was his student, he once mentioned the "the upward spiral model" of learning. Not until that moment had I realized most people learn by iterative increments over time. This certainly did not give me a false comfort in not fulfilling my learning duties, but opened a new chapter for me about the way I perceive learning and teaching. Now, after so many years, I have similar experiences with my own students, and I enjoy the pride of talking about the wisdom of my own mentor.

I wish Prof. Süzer a happy birthday and a long healthy life to continue inspiring many young scientists and contributing to the ocean of science with his giant droplets.

*2.5. Father Şefik Süzer written by Özgün Süzer, University of Michigan, Ann Arbor, USA*

There is much to be said about Prof. Dr. Şefik Süzer, the scientist and educator, the advisor and administrator, and the advocate, but I fear I lack the technical qualification and verbal finesse to do justice to his accomplishments in description. Ultimately, the fine standard for quality, diligence, and ingenuity he has established in the body of work he has produced—and continues to produce in full force—over the great span of his career speaks for itself.

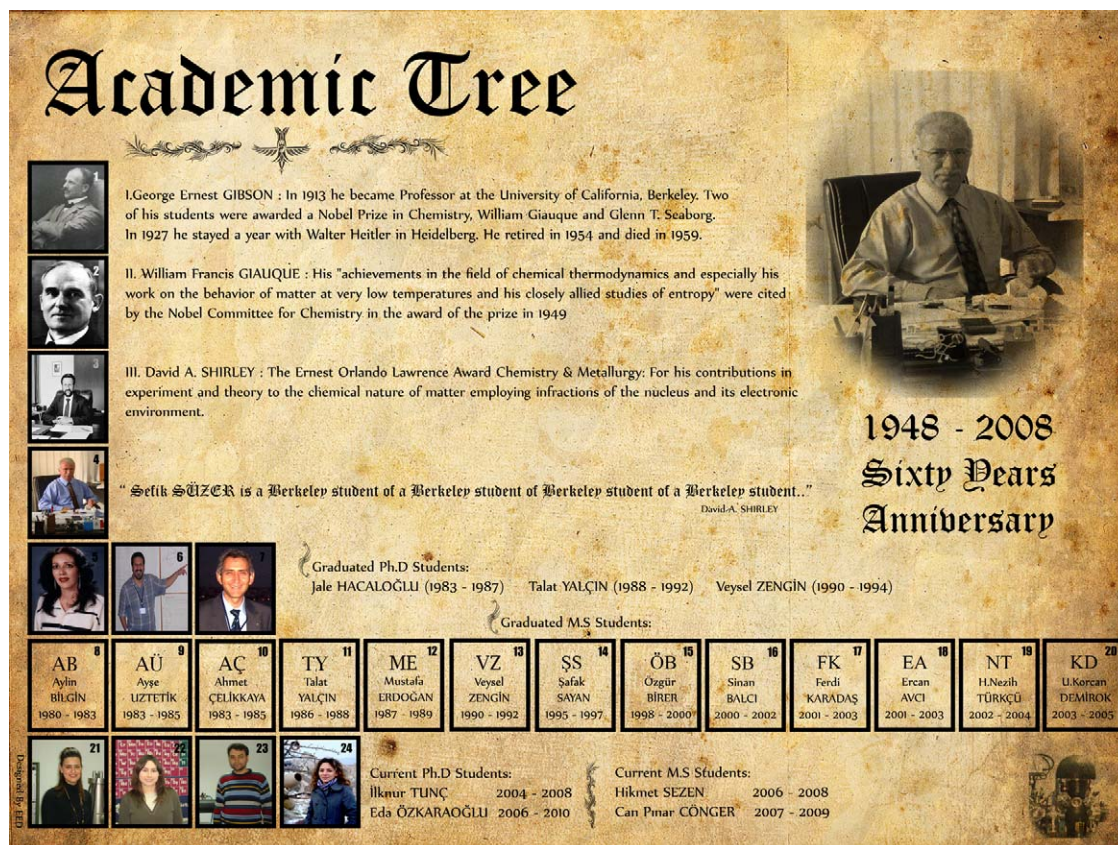
Instead, allow me to account for Şefik Süzer as the family man, the loving and caring father. However, it is a daunting task to attempt to summarize my personal relationship with my father into such few words—and one that I will not attempt here. I am privileged to be one of only two people on this planet to know my father in the unique way I do, as his child, but I am sure anybody who has interacted with him will find my perspectives familiar, for he is a frank and straightforward man who strives to uphold a unique set of ideals both in his professional life, and his personal and family life.

Whether one sees it in his persistent strive for physical fitness and a healthy lifestyle, which he has always tried to instill in my sister and I, despite our stubborn reluctance, or his industrious work and personal ethic, the value that my father places in discipline is obvious. He is an affectionate father, ever devoted to his family, who has always wanted the absolute best for his children and will not take "no" for an answer, even from his children themselves. The many lessons he has imparted to us, never vague and always on point, are an essential guide in navigating my own personal and professional life.

I am honored and privileged to have this opportunity to contribute to this Festschrift on occasion of my father's 60th birthday. It thrills me to join so many of his friends, colleagues, and students in wishing him a happy anniversary and many more joyous, prosperous, and productive years. I am sure all will agree when I say that, when it comes to my father, we *ain't seen nothing yet*.

Academic Tree of Prof. Şefik Süzer:

# Academic Tree



I. George Ernest GIBSON : In 1913 he became Professor at the University of California, Berkeley. Two of his students were awarded a Nobel Prize in Chemistry, William Giauque and Glenn T. Seaborg. In 1927 he stayed a year with Walter Heitler in Heidelberg. He retired in 1954 and died in 1959.

II. William Francis GIAUQUE : His "achievements in the field of chemical thermodynamics and especially his work on the behavior of matter at very low temperatures and his closely allied studies of entropy" were cited by the Nobel Committee for Chemistry in the award of the prize in 1949

III. David A. SHIRLEY : The Ernest Orlando Lawrence Award Chemistry & Metallurgy; for his contributions in experiment and theory to the chemical nature of matter employing infractions of the nucleus and its electronic environment.

"Şefik SÜZER is a Berkeley student of a Berkeley student of Berkeley student of a Berkeley student..."  
David A. SHIRLEY

1948 - 2008  
Sixty Years  
Anniversary

Graduated Ph.D Students:  
Jale HACALOĞLU (1983 - 1987) Talat YALÇIN (1988 - 1992) Veysel ZENGİN (1990 - 1994)

Graduated M.S Students:

AB <sup>8</sup> Aylin BİLGİN 1980 - 1983	AÜ <sup>9</sup> Ayşe LUTZETİK 1983 - 1985	AÇ <sup>10</sup> Ahmet ÇELİKKAYA 1983 - 1985	TY <sup>11</sup> Talat YALÇIN 1986 - 1988	ME <sup>12</sup> Mustafa ERDOĞAN 1987 - 1989	VZ <sup>13</sup> Veysel ZENGİN 1990 - 1992	SS <sup>14</sup> Safak SAYAN 1995 - 1997	ÖB <sup>15</sup> Özgür BİRER 1998 - 2000	SB <sup>16</sup> Sinan BALCI 2000 - 2002	FK <sup>17</sup> Ferdî KARADAŞ 2001 - 2003	EA <sup>18</sup> Ercan AVCI 2001 - 2003	NT <sup>19</sup> H.Nezih TÜRKÇÜ 2002 - 2004	KD <sup>20</sup> U.Karcan DEMİROK 2003 - 2005
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Current Ph.D Students:  
İlknur TUNÇ 2004 - 2008  
Eda ÖZKARAOĞLU 2006 - 2010

Current M.S Students:  
Hikmet SEZEN 2006 - 2008  
Can Pinar CÖNGER 2007 - 2009

## Reference

- [1] S. Süzer, K. Sauer, Sites of photoconversion of protochlorophyllide to chlorophyllide in Barley Seedlings, *Plant Physiol.* 48 (1) (1971) 60–63.

Şefik Süzer is a faculty member of the Department of Chemistry in the Faculty of Science, Bilkent University, Ankara, Turkey. He completed his B.S. in the Chemistry Department of the Middle East Technical University, Ankara, Turkey in 1970, and his Ph.D. in chemistry at the University of California, Berkeley, in 1976, under the supervision of David A. Shirley. He, then, carried out postdoctoral research work at Sydney University and Freiburg University and worked in the Chemistry Department of the Middle East Technical University, before joining Bilkent University. He served as the Chair of the Bilkent Chemistry Department between 1992 and 2007, spent sabbatical years in University of Virginia (1985–1987), University of Michigan (2000–2001), and University of Delaware (2007–2008). Recipient of the Alexander von Humboldt Fellowship, Fulbright Research Scholarship, the Encouragement (1981) and Science Awards (1990) given by TÜBİTAK (The Scientific and Technological Research Council of Turkey), he was elected to the Turkish Academy of Sciences as a full-member in 1993, and has been a member of the Science Board of TÜBİTAK during 2000–2008. He is a member of the Turkish Chemical Society, the American Chemical Society, the American Vacuum Society, the Society for Applied Spectroscopy, the Materials Research Society, and the American Association for Advancement of Science. He had served as a member of the Editorial Board of the *Journal of Electron Spectroscopy and*

*Related Phenomena* during 1980–1990, and he is recently selected back to the same Board as of July 2008. Prof. Süzer's research interests include spectroscopy, surface science and charge storage in nanostructured materials. His recent work has concentrated on utilizing "charging phenomena in XPS" for extracting analytical and electrical information about composite surface structures using both static (d.c.) and dynamic (a.c.) voltage stimuli. During the last 6 months, his group has successfully integrated use of optical stimuli for investigating time-dependent photovoltage effect(s). He is also the chair of the AVS Sponsored-13th European Conference on Applications of Surface and Interface Analysis, the ECASIA'09, to be held in Antalya, Turkey, during October 18–23, 2009. The conference has attracted more than 50% of the usual participants of the ECASIA series. He is the author of about 135 scientific publications in prestigious conferences and journals. He has supervised 5 Ph.D. and 13 M.Sc. students. Şefik Süzer is married to Melike, is the father of Özgür and Özge.

Guest Editor

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