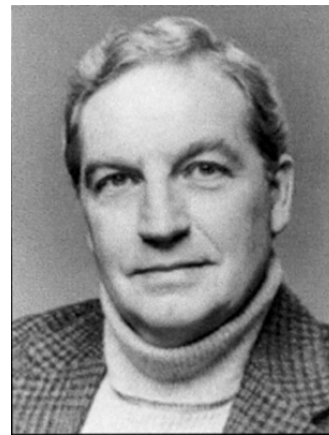


Obituary and Recollections for Bob Schiffmann



Bob Schiffmann

It is with great sadness that this AMPERE Newsletter reports the death of microwaves legend Bob Schiffmann, occurred on the last September 4th.

We report below an obituary by our Editorial Board, followed by recollections from colleagues that new Bob well over the past 50 years.

The statement issued by the IMPI Board of Governors on Sept 6, 2021 announcing the death of IMPI President Bob Schiffmann can be found at https://impi.org/wp-content/uploads/2021/09/President-Bob-Schiffmann_Final.pdf

Dr. Roberto Rosa

Editor in Chief, Department of Sciences and Methods for Engineering, University of Modena and Reggio Emilia, Italy

Robert (Bob) Schiffmann, the President of IMPI, passed away on September 4, 2021. Bob was involved in microwave and RF activities for nearly 60 years, until his last days. As a physical chemist, educated in Columbia and Purdue universities, Bob's career included R&D and consultation activities, and legal services as an expert witness. Bob held 28 US patents and was the co-author of several books. Bob chaired over twenty international conferences, and led many international courses on various aspects of microwave and RF processing technologies.

Mr. Schiffmann was widely recognized for his professional contributions. He was a Fellow of IMPI; the first recipient of the Metaxas Microwave-Pioneer Award (for his work in microwave power

applications for industrial and consumer applications); a laureate of the AMPERE Gold Medal (for lifetime achievements in microwave technology); and an Honorary Professor of the Kunming University of Science and Technology in China.

Besides his own professional activities, Bob voluntarily contributed to the microwave-heating associations in the US, Europe, and Asia, and he was widely recognized as a senior leader by these professional communities worldwide. Bob served as the President of IMPI in several periods (for 22 years in total). To his last term as IMPI's President, Bob was called more than a decade ago in order to rescue the organization from a severe managerial and professional crisis then. Despite the slim chances, Bob had successfully recovered the organization by his devoted leadership efforts. He reorganized the hired staff, created new income sources, balanced the deep financial deficit, and paid all the organization's debts (including those considered as totally lost by the creditors). Furthermore, in this period Bob has merged new technological sections into IMPI, such as the solid-state energy branch. In addition, he established fruitful collegial relations with other (seemingly competing) associations worldwide, including AMPERE. The present renaissance of microwave and RF processing technologies, and of their professional-association networking worldwide, is very much attributed to Bob's wise and friendly leadership.

Bob Schiffmann will be remembered not only as a pioneer of microwave technologies, and as a professional and organizational leader, but also as a kind and decent person who loved people and was warmheartedly respected by his colleagues worldwide.

For more reading: "An interview with Mr. Bob Schiffmann – IMPI's President," AMPERE Newsletter, Issue 95, March 12, 2018, Page 33 <https://www.ampereurope.org/issue-95/>

AMPERE Newsletter Editorial Board

Farewell to a dear friend and colleague

On Sept 6 the microwave heating community at large was stunned by the announcement by the IMPI Board of Governors that Bob Schiffmann had passed away following the recurrence of an aggressive cancer.

Many of our readers will not be aware that in the 1970's IMPI organised three of their Symposia in Europe. The first was in 1973 at Loughborough University, UK and it was at that Symposium that I first came across Bob. He had just been elected President of IMPI. He was wearing a large fur coat and I remember he was striding up and down the hall before the election took place ready to take the mantle of what was seen at the time as the only major organization which dealt with the topic of microwave heating. It soon became evident that he was a trend setter as regards all aspects of microwave heating as well as an inventor and entrepreneur. He was pivotal within IMPI and on a number of occasions he was asked to assist in steering the organisation on a path of recovery. He was also very supportive of AMPERE and a founding member.

I have many fond recollections not least the day we spent at his cabin at the Catskills mountains in Upstate New York in 1978 with his children and Stan Stuchly or the memorable dinner with Bob and Marilyn and the Kriegers at the rooftop restaurant of our hotel during the 2015 AMPERE meeting at Krakow. With Bernie and Bob on opposite camps politically the conversation produced vigorous arguments albeit at the end ending with a smile and toasting the future.

He and I kept in touch for over 45 years and the past few years we would often email each other, exchanging views about science and matters

pertaining to industrial applications. He was very generous with his time and advice always ready to assist.

He will be sorely missed and our thoughts are with his wife Marilyn and the family.

Ricky Metaxas

I think I first met Bob at the first conference I ever attended in 1989 (AMPERE, Arnhem, NL) and certainly at IMPI conferences from the early 1990s. Once you met Bob, you cannot un-meet him! In an instant, Bob was this larger-than-life character who you never forgot, and looked forward to meeting again.

In my early career, Bob came across as quite scary (to me!), a force of nature, never afraid to ask questions and challenge literally any presenter. But in casual / social settings, Bob was always delightful and full of neverending stories from his early development work in the 1960's to more recent court room dramas as an expert witness in microwave injury work. Bob should have written a book about his microwave stories!

Bob consulted for me on various research projects over the last 30 years. His vast experience of product and process success and failures was always insightful and very useful. And Bob's network and connections must be second to none, they helped me out more than once.

I last met Bob in person at the 2019 AMPERE conference in Valencia, I was lucky enough to share a table with Bob at the gala dinner along with other microwave giants (Ricky, Bernie, John Gerling), the conference highlight for me! Most recently at the virtual 2021 IMPI conference, Bob was the same dynamic leader as when I first met him 30 years ago. I really cannot believe Bob has left us, I will miss him greatly. My sincerest condolences to Bob's family and friends.

John Bows

My first encounter with Bob would have been at the Microwave Congress held in Sydney, in 2002, which was my first experience at an international conference. I presented a paper from my PhD, which was based on rapid microwave heating of green timber to burst the wood cells, followed by solar drying of the timber. Bob seemed to think this was a

good idea. I soon discovered that one of his pet peeves was using microwave energy to dry materials. He thought it used far too much energy.

I continued to encounter Bob at further conferences in the US and at AMPERE Conferences. I quickly concluded that Bob did not suffer fools, but was very supportive of people with new and sensible ideas for microwave applications. In 2015, I was asked to become a Board Member for IMPI, which, along with being an unexpected honour, allowed me to know Bob much better. He was willing to place trust in others. On two occasions (2015 and again in 2017) he asked me to deputise for him at the Chinese National Microwave Conferences. I also observed this trust with others as well.

He was at the helm of IMPI for quite some time and by combining his enormous energy with that of Ms Molly Poissant, they have steered IMPI back to being a vibrant association. He will be greatly missed. He was passionate about microwaves and their applications. He seemed to enjoy learning new things, although his knowledge was extensive, and from my perspective he was a great mentor and friend. We will miss him.

Graham Brodie

I am devastated to hear the sad news of Mr. Bob Schiffmann's passing. Bob was IMPI's trusted President and showed excellent leadership skills through Microwave Working Group as well. Every time I see him, I could receive his encouragement over the research development. I shall miss him always as one of the research fellows. I hope he rest in peace forever.

Yoshio Nikawa

I probably first met Bob back in the early 1990s, though it could easily have been earlier. Bob was one of those people who, once you have got to know them, it really feels as if you have known them all of your life.

In many ways, he was a larger-than-life character; always smiling, always cheerful, always happy to share his knowledge, his experience and his remembrances. He came from an unconventional background, having been a ballet dancer in his youth (I've seen the pictures that line the staircase of his brownstone house in New York), but rapidly

became, I believe, the most sought-after consultant in the field of microwaves, both for cooking and other industrial applications. He was also insatiably curious, often asking not only more questions than anyone else in a room, but usually the most perceptive as well.

My best memory of him, however, is his willingness to join in any fun going, which included choreographing and then participating in a dance routine as entertainment for the delegates attending the AMPERE conference being held in Bayreuth, Germany, in 2001. Although I typically only got to see Bob once or twice a year at microwave conferences, I will still miss him a lot; the world is that little bit smaller a place now.

Jon Binner



From right to left, Bob Schiffmann, Monika Willert-Porada, Jane Binner and Jon Binner entertaining the AMPERE 2001 delegates in Bayreuth, Germany.

I first met Bob in the summer of 2010 at the IMPI Symposium in Denver, Colorado. Right from the start, it was clear to me that Bob was something special. He was a natural leader and had an uncanny way of making newcomers feel welcome. He took a chance on me when he asked me to become the Executive Director of IMPI, and over the next 11 years, I soaked up as much as I could from him both professionally and personally.

Early on, I learned how to stay on Bob's good side: ensure a copy of the NY Times was delivered to his hotel room at our annual events! I have so many wonderful memories over the years: the dinners with Bob and Marilyn, the advice he would share with my sons when he visited Richmond,

Virginia each year, the work calls interrupted so he could tell me about the wildlife he spotted outside his lab in the Catskills, and the times his dictation device would accidentally swap out what he intended to write with some foul language! Bob never took himself too seriously; he gave freely of his time and was one of the kindest people I have ever known.

Bob loved leading IMPI and he often marveled at how lucky he was to spend his life working alongside so many talented and good people. The last true “work email” I received from Bob before his illness was titled “IMPI’s Future.” As we navigate how to move forward without Bob at the helm, we’ll look to his words, and the example he set for all of us. In the end, IMPI was his legacy. We’ll continue the work - he wouldn’t want it any other way.

Molly Poisant

Executive Director, IMPI

Here are a few of my special memories with Bob:

It was 1979, the place Monaco. Bob, Ken, Percy and other senior members were waiting the arrival of Wayne Tinga, President of IMPI. Then, to our surprise, on his arrival he gave us some startling news. During his flight over he received a message from a Christian Hierarchy to relinquish his Presidency of IMPI. This he did and Bob Dechero took over!

Then, following the Symposium, we spent a few days together getting to know each other, with Bob at the wheel of a 4-seater VW driving through the streets of Monaco and trying to understand Wayne's predicament [photo below shows the four of us].

Soon after all the proceedings had finished, Bob was elected the Presidency of IMPI. Over the next 25 years Bob and I became very good friends with collective knowledge in the microwave arena. I would help him with microwave measurement activities and techniques and he would bombard me with theory. He would travel many times to our lab facilities in Orlando and latterly in Nashville and I with trips to Bob's homes in New York and the Catskills.

One very funny incident at one of the IMPI Symposiums was when many members would play with a yellow rubber duck in the hotel's pool and

whoever won the silly game got the Rubber Ducky Award! Fun times.



From left to right, Percy Giles, Wayne Tinga, Ken Eke and Bob Schiffmann

We soon learnt that we had one thing in common. Maybe not too many people know that Bob in his younger days was a ballet dancer and I was a Latin American dancer. With my business in England, Bob was invited on a popular British television series to explain the workings of the microwave oven and its safety. He also involved himself with the electrical transmission authorities in the UK, known as ATL and BEAB.

Bob and I then decided it would be useful to the Microwave community to jointly combine our technical knowledge into a video format with us both presenting our knowledge and accomplishments over the years.

As our health waned, we would FaceTime each other often and, just before his passing, Bob told me his condition was terminal and was giving up his Presidency of IMPI. I was shocked and saddened – I will miss my friend yet he led such a rewarding life...

With my deep affection,

Ken Eke

On a quiet afternoon of a Sunday of early September (September 5th), members of International Microwave Power Institute (IMPI) Board of Governors received an email from IMPI Executive Director Ms. Molly Poisant that shocked us all: IMPI President Bob Schiffman passed away after suffering

from a short illness. This news has saddened everyone associated with IMPI.

I got to know Bob after joining IMPI in 1996. But my close association with him started in 2009 when I served as IMPI President. While diving deep into the busyness of the organization as the new president, I soon realized that IMPI was in a very bad financial condition. It had accumulated a large debt with an increasing deficit in yearly operation. The financial burden badly influenced the functioning of the organization and jeopardized the future of the Journal of Microwave Power and Electromagnetic Energy (JMPEE). I also realized that the reasons why IMPI had gotten into this situation were so complicated that I, a university faculty member, did not have time and business experience to address them.



Bob Schiffmann (2nd from right in front row) with Tang's students and research associates of Washington State University at 2012 IMPI Annual Meeting in Providence, USA.

At the annual meeting, I informed Bob about the situation and talked Bob into running for IMPI's president in 2010. I could not think of anyone else to save IMPI and JMPEE. Having a deep love for IMPI, Bob took the challenge. Over the first several months as the new IMPI President in 2010, he and Molly spent hundreds of hours diagnosing problems and making difficult decisions. Those efforts paved the path for IMPI to gradually move out of the financial hole. Under his leadership, IMPI organized several industry sponsored symposia and workshops per year, in addition to annual meetings. IMPI contracted to Taylor & Francis as publisher of JMPEE and appointed Dr. Juan Aguilar as editor. It has now evolved into a healthy organization with close to 30 corporate members. JMPEE has also become a successful professional journal with rising impact

factor. It is fair to say that Bob indeed saved IMPI and JMPEE. He will be deeply missed as a passionate leader, mentor, and friend by all who have been involved in IMPI and benefited from its activities. He will also be missed by the food industry as a most sought-after expert on food safety related to microwave heating.

Juming Tang

Bob Schiffmann had been both a mentor and friend almost from our first meeting several decades ago. His profound sense of integrity helped me navigate some very rough terrain during my early days with IMPI, while his sense of rationalism always helped me make sense of the absurdities and keep things in perspective.

Bob's sense of humor was always present to liven a conference session or dinner party. I was always captivated by his multitude of stories about projects that were either highly successful or dismal failures.

Our small community will miss Bob but the contributions he made for the benefit of us all will live for eternity.

John Gerling

I met Bob for the first time at his home. It was in February 2004. The input of UIE to a next IMPI conference was the purpose of our meeting. We were sitting at the table in his living room, and notwithstanding the professional purpose of our discussion, the atmosphere was relaxed, joyful, amicable, but also very to-the-point.

Since that time, I met Bob at regular intervals of AMPERE conferences. These meetings made it time and again clear that the "living room" atmosphere on that day of February 2004 was perfectly linked to Bob's personality: relaxed, joyful, amicable, but always very to-the-point.

At the occasion of a conference in Spain – it was very hot that summer in Spain! – Bob confided to me that he enjoyed taking some siesta after lunch and having an afternoon coffee on the balcony of his hotel room. Elegance and "*savoir vivre*" can be added to the aforementioned characteristics of Bob indeed!

I will remember Bob smiling, dancing, joking, and always patiently but confidently waiting

for some upcoming wonder, in microwaves, in science, in music, in art, in conversation, in ...

Goodbye, Bob, your patience will not be in vain!

Koen Van Reusel
UIE General Secretary

Very sad to hear: I heard the sad news today for first time. I have very good memories from meetings with Bob and also his wife Marilyn.

I met Bob the first time during the Orlando Int MW Congress 1996. Marlies met Marilyn and all the other wives like also Margret during the 1st Ampere congress at Valencia 1999 - during the companion tour program all the wives had a great time. From that time, we met Bob more regularly and a friendship developed not based only on our interest in microwaves. We not only met during Ampere congresses, also in Kunming 2011 & Otsu (GCMEA) JP 2008.

Further we once met with Bob & Marilyn in front of their door in NY in 2014. The last time it was at Valencia 2019. The last email he said "Let's hope for another meeting soon...".

A great guy left the stage but he is still in our hearts.

Carpe diem

Peter Pueschner



Bob Schiffmann with Peter Pueschner



Bob Schiffmann with Peter Pueschner

As Past President of AMPERE I do remember all our talks, on line or on the phone, to put together the different souls of our small MW and RF community. His vision was indeed inclusive and his mind was open to innovation and the young generation. Together we managed to recover the JMPEE, to get organized for 2GCMEA in Long Beach and to start the organization for 4GCMEA in Chengdu.

Many memories come to my mind when thinking of Bob, who I recall supporting AMPERE during the OGA when trying to give some advice for improving the economic situation of the Association. A man with a great personality when dealing with electroheat, management of the association and even during the social events with his fondness for dancing and good food.

Undoubtedly we will miss him and his positive attitude towards life and his job as well as the future of our community.

Cristina Leonelli

I first met Bob Schiffmann in person almost two decades ago, in one of the major int'l conferences. Bob stopped by my poster, quickly focused on the main points, and gently asked a series of challenging questions. This fruitful discussion reflected to me the wide experience and deep intuitive understanding of Bob in microwave processing.

Years later, I had ended my editorial role in IMPI, shortly before Bob was elected President. IMPI suffered a severe managerial crisis at this time, and I must admit that, though I knew Bob as a fine person and a microwave expert, I had doubts that he (or anybody else) can rescue IMPI. Against all odds, Bob successfully did it. In his friendly, honest, and

yet decisive manner, Bob emerged then as a true leader.

Over the years, I occasionally met Bob and Marilyn in microwave conferences worldwide, and we had also maintained some e-mail contacts. In my view, Bob was not only “Mr. Microwave”, but also “a man of the people”, in both aspects of his friendly and pleasant attitude towards other people (including luckily us) and also by his generous leadership that confined together our microwave communities worldwide. I am glad at least that AMPERE has timely honored Bob Schiffmann also during his life time, as for instance by the very-well deserved Gold Medal awarded to him in 2019, which in retrospect celebrated Bob’s generous life-time contribution to our field.

Eli Jerby

Je veux dire que Marie-Claude et moi-même avons été très peiné d’apprendre que Bob avait déjà fini sa vie sur cette terre mais qu’il nous laisse mille souvenirs d’un homme merveilleux et attentionné. Sa famille quitta une Europe en folie et traversa l’Atlantique sur le Normandie le 24 Aout 39, Bob devait avoir trois ou quatre ans.

En Amérique, il eut un cursus scolaire et universitaire scientifique auquel il ajouta la danse. Il a peut-être espéré en faire son job et toute sa vie il en a gardé l’art d’arrondir les angles et de ne jamais blessé ou heurté un interlocuteur.

Il avait aussi le grand désir de rester libre au point d’inventer son propre travail: il y avait chez lui, dans sa maison, un assortiment de fours microonde domestiques et il est ainsi devenu un conseil industriel renommé en packaging alimentaire.

Il savait aussi qu’il fallait sans cesse assurer sa publicité d’où la création de l’IMPI et du C.A.S, Cooking Appliance System, noyau très actif de l’IMPI qu’il a présidé pendant de nombreuses années.

En France, le programme de production d’électricité nucléaire nécessitait de développer aussi les applications industrielles, microonde-HF mais aussi induction, pompe à chaleur et de nombreuses autres. L’IMPI intéressait EDF pour participer à l’organisation, en France, d’un colloque sur les microondes dans l’industrie et nous sommes partis rencontrer Bob aux US: de la discussion naquit l’idée

d’organiser, en France, un colloque annuel de l’IMPI qui s’était toujours tenu aux US. Ce fut le colloque de Monaco en 78.

Bob et plusieurs de ses compatriotes présentèrent des communications. Le colloque de Monaco donna naissance à l’association AMPERE. Bo est revenu en France à la demande d’un Industriel du boitage aluminium. L’utilisation de contenants aluminium dans les fours microonde domestiques se faisait avec beaucoup de difficultés parce qu’il y avait quelque fois des arcs et parce que les fabricants de fours étaient réticents et faisaient de la contre publicité. Dans sa conférence, Bob insista sur la physique du chauffage microonde et sur la migration dans l’aliment de certains constituants des barquettes en plastique; la conférence fut suivie d’un goûter tout microonde-aluminium autour duquel chacun put interroger l’orateur. Et la question ne se posa plus: par sa technicité multidisciplinaire et son calme, Bob avait désamorcé la dispute.

Nous nous sommes encore revus longuement au cours de la réunion AMPERE à Oradéa. Nous nous étions donné rendez-vous à Budapest et avons visité la ville et ses restes romains avant de rejoindre Oradea en voiture. Nous étions aussi avec Bernie et nos épouses et nous avons un peu refait le monde amicalement.

Avec la disparition de Bob, nous pleurons un ami très cher.

Serge Lefevre

When I first met Bob, it was clear to me that he was a kind of an elder statesman in our community. He was understandably a man who was admired and held in high regards.

As the years passed, I got to know him better as we worked together with the International Microwave Power Institute (IMPI), it was apparent why. Bob was a living encyclopedia of microwaves. Not only did he have a vast and extensive knowledge of RF and microwave, but also a genuine passion to share it through his teaching and mentoring. He was until the very end, the guiding light and cornerstone of IMPI. His legacy will live on through the institute.

I will miss his quick wit, perspective, sense of humor, and his zest for life. He has left a mark that

will not soon be forgotten. Bob was a gentleman, a scholar, an inspiration, and a friend.

John Mastela

Everyone who knew Bob Schiffmann knew him in a personal way. He was the kind of individual who resonated differently with different people. Despite our primarily professional acquaintance, I was privileged to catch glimpses of a number of Bob's incarnations. Still, first and foremost, he was an enthusiastic engineer and a legendary expert in microwave power technology. He was in the public eye for so many years, his status as one of the pioneers of the field and one of its founding fathers comes as no surprise.

It is remarkable how far from his native Manhattan his robust reputation extended. In 2011, I was lucky to be with Bob in a group of several invitees at a national microwave conference in southwestern China. For the convenience of hundreds of local engineers and technicians, the event was held in Chinese, and, given the remote location and the dominance of the native language, it was easy to assume that the local professional life would be quite removed from the rest of the world. However, it turned out that everyone knew Bob Schiffmann; everyone knew about his work, about his status, about his multifaceted expertise.

To go back even further: when I was working on my Ph.D. Thesis (in the early to mid-1980s), I was a frequent visitor to the State Public Scientific and Technical Library in Moscow. Located downtown, two blocks from the Bolshoi Theater and three blocks from the Kremlin, the library had not only a full collection of the Journal of Microwave Power and EM Energy, but also many issues of the semi-commercial IMPI magazine Microwave World from the 1970s and 1980s. I was an avid reader of that magazine, in which Bob regularly ran ads for his consulting business and periodically published review articles on various subjects. Those reviews were published with large photos of Bob, so when several years later, in 1992, I arrived at the reception of my first IMPI Symposium (held on a riverboat in Chicago), I recognized him immediately, as though I had known him my whole life.

Bob had a wide range of interests aside from microwave power engineering. He was deeply

immersed in important social and political movements; fly fishing in his beloved Catskills was one of his most enduring hobbies. Yet, more than anything, I knew him as a passionate music lover. He and his wife Marilyn were dedicated patrons of the Metropolitan Opera (located at a 20-minute walking distance from their home on West 88th Street). When I started following this illustrious theater's productions about a decade ago, Bob became a precious source of stories about notable Met productions and curious occurrences in and around the theater. From the passionate, deeply emotional way in which he delivered those stories, it was clear that music was truly in his heart.

We were usually synchronous in our opinions about Met staging, but we didn't converge in our takes on the latest production of Wagner's Ring. This was probably the only thing in the realm of the arts on which we were not on the same page, and, regrettably, in the several years since the Met premiere, I never had the chance to talk to him about it in depth and figure out what exactly Bob did not like about that production (which I considered outstanding). I will never know this now but will always think about it. In this way, he will never stop pushing me to further reflect on music and the arts. Bob will be deeply missed as a highly respected and deeply experienced colleague as well as a truly remarkable human being.

Vadim V. Yakovlev

It is with great sadness that AMPERE has received the news of Bob Schiffmann's death. Bob has been a pioneer in our community, he was among the very first researchers to recognise the potential benefits of microwave and radiofrequency energy in the processing of materials and for that purpose has worked tirelessly to create a community of likeminded researchers.

He was a founding member of AMPERE and president of IMPI until his death. His vision it was inclusive and always welcomed new people and ideas.

Bob will be greatly missed but his legacy will remain and serve as an example to all of us.

George Dimitrakis
AMPERE President