

## ***Obituary and Recollections for Georges and Jeannine Roussy***



It is with great sadness that the Newsletter reports the deaths of Georges and Jeannine Roussy at the beginning of the year within days of each other.



Georges was born on in Nancy, France, on February 1938. He received the electrical engineering degree from the Ecole Nationale Supérieure d'Electricité et de Mécanique, France, in 1962, and the M.S. degree in mathematics and Ph.D. degree in physical chemistry from Nancy University, Nancy, France, in 1961 and 1969, respectively. From 1962 to 2003, he was with the Centre National de la Recherche Scientifique (CNRS), where he was in charge of the development of microwave and RF industrial applications. Later he was a consultant with the Bureau d'Ingénierie Pro-Mi-Thé, Laxou. He has authored over 200 papers in refereed journals. He coauthored *Foundations and Industrial Applications of Microwave and Radio Frequency Fields* (New York:Wiley, 1995). He holds 30 patents. His scientific interests were in design of measurement techniques, microwave assisted catalysis and polymerization, and process modeling. He has also studied the molecular structure of numerous molecules by gas phase rotational spectroscopy. He was a Fellow of the International Microwave Power Institute.

My personal contacts to Georges were limited to coffee breaks and social event during AMPERE conferences. I remember very well our lively discussions about scientific topics as well as about his lovely native city Nancy, where I had closer contacts to, due to exchange programs during my school time. Whatever scientific topic I came up with and thought to be something novel and interesting, he always knew well about the problems and potential solutions. I miss this kind of lively, motivating and fruitful discussions with him and his always-friendly attitude.

In the following, several colleagues pay tribute to our esteemed scholar and his wife.

**Guido Link**

AMPERE Newsletter Editor

Georges and Jeannine Roussy passed away at the end of last year; Georges leaves us with important and rigorous scientific work that is both fundamental and applied in the field of the interaction of materials and power waves.

Georges, a mechanical engineer from ENSEM in Nancy, completed his doctorate thesis in chemistry using microwave spectroscopy to study in particular the behavior of zeolites and their industrial uses.

All his life, he has deepened his dual perspective as a fundamental researcher and an applied engineer; without ever deviating from his thoroughness and the confidence that his writings and oral communications inspired.

In the 1970s, Electricité de France (EDF) initiated the creation of Industry-Research Clubs in support of its nuclear power generation program. There was a “HF Microwave” Club in which Georges, with his rigor and his double hat, took an eminent role.

In 1978, following the IMPI-Europe microwave conferences held at Loughborough (1973) and Louvain (1976) EDF organized the third in the series at Monaco. Georges played a crucial role as organizer of this event. The quality of the papers and the number of participants showed that Europe could be a significant player to this new scientific field.

The AMPERE association was born from these needs and Georges remains with us as a scientific pillar of the association.

**Serge Lefeuve**



Georges and Jeannine Roussy at the AMPERE 2011 meeting in Toulouse

We are all very sad at the deaths of Georges Roussy and his wife Jeannine within a few a days of each other on 31st December 2020 and 2nd January 2021 respectively.

I have known Georges through my visits to the USA attending the annual IMPI Symposia but primarily through the biennial AMPERE conferences. Georges was highly regarded in the field of microwave heating as applied to many topics such as his pet subject of catalysis having set up a research group at the Laboratoire de Spectroscopie et des Techniques Microondes, Physicothermie

Eletromagnetic at the University of Nancy, in France, a group largely supported by C.N.R.S. Many of the papers emanating from his group were seminal as was his book co-authored with J Pearce entitled, “Foundations of Industrial Applications of Microwaves and Radio Frequency Fields”. Georges joined the Management Committee of AMPERE in 1997 during the meeting at Fermo and his counsel was always wise and punctuated with succinct arguments and indeed some humour. A graduate from one of the grandes écoles he fiercely supported centres of excellence such as his own. I recollect with fondness a meeting in Frankfurt at the beginning of the millennium about the next AMPERE conference to be staged at Bayreuth the following year. After the meeting we adjourned to a coffee house where he revealed that he was not going to drive back to Nancy immediately but he was spending a couple of hours indulging in his hobby, philately, and visit a shop in the city where he knew they kept a special issue stamp he wanted to buy for his great collection.

My wife Margaret has also fond memories of Jeannine. Like most of the accompanying contingent at the Ampere Conferences, Jeannine was an avid supporter and they spent many a happy hour bridging the language divide whilst enjoying the historic hotspots of the city. Jeannine had such a genuine personality and easily empathised with the mixed group they invariably were on an age and nationality level. She is remembered with affection for her sense of fun and caring nature.

The microwave fraternity will miss a great innovator and especially his unique way of delivering his papers often mesmerising audiences.

**Ricky and Margaret Metaxas**

I am deeply sorry about Georges and Jeannine Roussy. I didn't have the privilege to know them closely, but I couldn't miss the vitality, the friendly manners, and the healthy humor of Georges in our conferences.

Moreover, I couldn't miss Georges' work - and in particular his pioneering study on thermal-runaway instability - which in my view is a great contribution to our field, and so it will remain.

**Eli Jerby**

Perhaps my best recollection of Georges - and I have several, he was such a distinctive character - is when I involved him in a consultancy that I had from the company called Rockwool. They were (and perhaps still are) using microwaves to melt rocks and then spinning the molten material to form fibres that are then used in roof insulation, but were having problems with their microwave facility. Since the plant was based near Clermont-Ferrand in France, I involved Georges to support me on the dielectric measurement front. To watch him explaining the technicalities in a curious mix of English (for my benefit) and French (particularly when he got over excited) was an absolute treat. He had a wonderful sense of humour and was obviously extremely passionate about his subject - he could be quite difficult to stop once he had worked up a bit of a head of steam ... I shall miss him very much.

**John Binner**

I knew Georges for around 30 years, mostly enjoying his larger than life presence at microwave conferences and the occasional opportunity to discuss, and be corrected on, deep field physics theory and practice at conference dinners. I found Georges fascinating, and loved his passion and commitment to our microwave and RF world. Georges was a real character who communicated his science in a unique and compelling way, and I will miss him a great deal.

**John Bows**

We are deeply saddened to receive the news for Georges and Jeannine. We visited their home in France with Professor van Loock. That memory is still alive. Georges and Jeannine were very active at the time.

**Fay & Nguyen**

I have a very fond memory of Georges Roussy. First, he and his wife Jeanine, visited us in New York City, where we had a lovely lunch together. However, as always, I had difficulty understanding Georges since his English was rather poor, and I don't speak French. However we continued to try to chat with each other, until one day, when we discovered that

we both spoke German, after which Georges and I would sit on buses together and socialized at AMPERE meetings, spending long periods of time chatting with each other in German.

Georges was a lovely guy, with a good sense of humor, and I will miss him greatly.

**Bob Schiffmann**

Very sad to hear that Georges and Jeannine Roussy passed away.

I have many good memories in the early days where I was allowed to join the Ampere Management Committee. Funny Georges always was in a good mood with all his fancy mw & hf ideas and he had so much experiences in all kind of industries & applications. It was always fun to chat with him. I think, the last time I met Georges was in Toulouse. Time is limited, so what to do and how to find the best balance between private happiness and thrilling projects with our small niche mw technology out somewhere on the battle fields of global interests among the big players. It is always the old dilemma: we want the freedom to do the thrilling significant things out somewhere and also we want to have the secureness to enjoy the happiness in the harbor of our families. Colleagues also like Ricky and myself have the luck, that our wives are close to us in supporting us (and preventing us to do big mistakes too). And so was Georges and Jeannine. I think this is special with the Ampere community, that there are so many couples, who know each other for a long time forming friendships and creating stability in the committee.

Anyway, I feel, even not knowing Georges too much that he and Jeanine had a happy & rich life. In the time we met, I was always attracted by all the stories Georges shared. Marlies has good memories within the companion tours where Jeannine, amongst all the others also with Ricky Metaxas' wife Margaret, always formed a great group enjoying themselves.

I attach some pictures of Georges and Jeannine from the AMPERE Conference at Oradea.

**Peter and Marlies Püschner**



From left to right, Jeannine Roussy, Marie-Claude and Serge Lefevre, Georges Roussy, Therese and Walter Van Look at dinner after the drinks reception in Oradea.

I remember Georges Roussy and his wife Jeannine as very friendly and polite with a welcoming attitude and a wonderful sense of humour. I met them the first time at the AMPERE conference in Fermo, Italy, in 1997, and then at a number of AMPERE conferences since then. I appreciated their company and will remember the valuable discussions. I will miss them deeply.

**Birgitta Raaholt**

In 1976/1977 as a student at Claude Bernard University in LYON, I had the opportunity to meet Georges Roussy on several occasions during his visits to the laboratory of our professor Jean Pierre Pellissier and during 2 international microwave congresses in Lyon (organized by our Professor) and in Toulouse (organized by Serge Lefevre).

He was a person who impressed me greatly with his great knowledge and his position as Director of Research at the CNRS in Nancy.

In Sairem's first years our relationship was mostly professional but over the years our relationship has grown into a true friendship.

I liked to meet Georges and Jeannine because they were a wonderful couple. Jeannine had boundless energy, loved to laugh. Georges was a little more reserved but also knew how to be very friendly.

I liked to exchange very often with Georges on many subjects because he had a remarkable knowledge.

**Jean-Paul Bernard**

I have known Georges Roussy since the 1980s from my earliest attendances at IMPI and AMPERE conferences. As a freshly minted engineer new to an intimidating world of science and technology, Georges' pleasant and happy personality always made me feel relaxed and welcome. Georges was not only a giant amongst his peers, he was the friendly spirit of our community.

**John F Gerling**

I am devastated to hear the sad news of Dr. Georges Roussy and Mrs. Jeannine Roussy's passing.

Every time I see them, I can see the kindness in their eyes and friendliness in their full smile. I can feel that they treated me as a best friend. I shall miss them always. I will never forget them. I hope they rest in peace forever.

**Yoshio Nikawa**

I am sorry to read the sad news about Georges Roussy. I did meet him at some conferences but did not know him more than that, although I have been reading in his book on Foundations and Industrial Applications of Microwaves and Radio Frequency Fields. Just now looking into his work, I am amazed

how fundamental and at the same time how practical that work is, full of chemical references and graphs. This book remains an invaluable reference in the RF- and microwave treatment of materials although it was published some twenty-five years ago.

**Daniel Van Dommelen**

I first met Georges Roussy in 1997 at the Ampere Conference held in Valencia. Since then, we shared many meetings and discussions in subsequent Ampere conferences and also during the Ampere committee meetings. In all these meetings we had very passionate debates about the re-design of old microwave measurement devices making use of modern electronic circuits developed for mobile phones. I remember his special excitement in teaching his developments and his willingness to collaborate with the design of all these devices. We will miss him deeply. Rest in peace with his wife Jeannine."

**Jose M. Catalá-Civera**

My memory of Georges goes back to the beginning of 2008, during a meeting organized in Karlsruhe, where Georges came from nearby Nancy. Having been recently introduced by Serge Lefeuvre in the power microwave community, within AMPERE, I lacked experience and Georges knew it. We discussed at length on many subjects, and Georges shared with me his views on the organization of teaching power microwaves in French engineering schools and universities, and especially the importance of industrial applications as a measure of this exciting and demanding subject.

We have met again during successive AMPERE conferences, and our favorite topic of discussion was always around the roles of academics in the transmission of knowledge and know-how, but also enthusiasm, passion for the profession, to students, researchers and engineers, in a world in perpetual change in which having goals is fundamental.

Georges left, with Jeannine. His words and wisdom will remain in my memory and our memories.

**Tao Junwu**

I met Georges in Valencia when I have just started my doctoral thesis. I remember Georges Roussy as a man of a strong character but with a smile on his face. His book "Foundations and industrial applications of microwave and radio frequency fields physical and chemical processes" was a great help for my research and for this I will always be grateful. A great member of this small community leave us but much of his knowledge will still stay with us in his numerous publications. Rest in peace with Jeannine.

**Juan Monzó-Cabrera**

In this sad moment, the AMPERE community that I've represented as President for 10 years wish to honor the personality of Georges and its unique strength in life and deep knowledge of electroheat that he shared with us. During our conferences, he used to stand up at the question time and ask the audience to focus on the profound significance of our experiments and findings with his rigid yet gentle trait. The lovely personality of Jeannine, always at his side, delighted the gala dinners and shared their love for good food and wine with those they knew, worked with, and loved. We will remember his enormous contribution to the creation of AMPERE community with his participation to the management community and to all the editions of the conference even after his retirement.

**Cristina Leonelli**

Previous AMPERE President

AMPERE is deeply saddened by the loss of Dr. Georges Roussy who has been a pioneer in our discipline and active in our community for many years. Being a capable theoretician himself has contributed immensely in the elucidation and understanding of thermal runaway, often observed in materials during microwave processing. Our thoughts are with everybody that has been close to him.

**George Dimitrakis**

AMPERE President