Dominique Givord

(1945 - 2019)

Testimonies





Dominique Givord passed away this February 2019. He has been a key person in establishing the European community of Magnetism, including the European School on Magnetism, the Joint European Magnetic Symposia and the European Magnetism Association. Enclosed are testimonies gathered through the European Magnetism Association.

Dominique Givord was an outstanding scientist, a teacher to many, and a leader within the magnetism community. Dominique's research interests were wide and varied and included fundamental studies of the paramagnetic response of metallic ferromagnets, magnetism of rare-earth transition metal alloys, magnetisation reversal in high performance permanent magnets, exchange bias in nanoparticles, electric field effects on magnetic thin films, antiferromagnetic spintronics, and bio-medical applications of micro-magnets. His passion and enthusiasm inspired coworkers and colleagues, and he will be remembered for his stimulating and challenging discussions.

Dominique contributed greatly to the magnetism community at both the national and international levels. He was the director of the CNRS Laboratoire Louis Néel in Grenoble (1992-2000) and then the national pulsed magnetic field laboratory (LNCMP) in Toulouse (2000-2002). He was a co-founder and co-coordinator of the European Commission funded Concerted European Action on Magnets (CEAM), a project with over 70 partners from academia and industry which ran from 1985 until 1993. This project promoted pan-European collaboration related to the development and use of high performance rare-earth transition metal magnets through scientist exchanges, regular meetings and information sharing.

He forged special links with the Vietnamese magnetism community, starting within the framework of a Dutch sponsored effort to restore scientific research in the post-war years, and was awarded the State Prize of Science and Technology and the Medal of people friendship of the Government of Vietnam. He also played a key role in building close ties between the magnetism communities in France and Romania and was instrumental in establishing the Franco-Romanian Summer School on Magnetism. This biennial school ran from 1999-2003 and in 2005 it evolved into the "European School on Magnetism". Dominique was a driving force behind the establishment of The Joint European Magnetic Symposia (JEMS) and chaired the first edition of this conference when it was held in Grenoble in 2001. The progressive gain in importance of these two European events has contributed to building a European magnetism community, which Dominique wholeheartedly promoted as a co-founder of the European Magnetism Association. Dominique collaborated with a number of Brazilian groups, and was a visiting professor in the Universidade Federal do Rio de Janeiro. He served as secretary of the magnetism commission of the International Union of Pure and Applied Physics (IUPAP) and as an editor of the Journal of Magnetism and Magnetic Materials.

Dominique was a caring, generous, sincere and very accessible person, and continued to the end to mentor and inspire young researchers. With his profound understanding of magnetism combined with his intuition he formed a critical link between today's research efforts, which benefit from transformational advances in both computing and characterisation possibilities, and the wealth of yesteryear's efforts. The outpouring of glowing testimonies received in these last days are a measure of the man. To paraphrase an African sage, "when an elder dies, a library burns", surely applies to this Sensei who will be missed.

Salvador Ferrer, Alba synchrotron light source, Spain.

I met Dominique for the first time in 1988 when I arrived to Grenoble during the design phase of the ESRF. I was immediately impressed by his generosity and enthusiasm towards research. We collaborated during three years in an European project. We became friends and meet occasionally. I learnt magnetism from him and also I admired his personality and vision of things. I will never forget Dominique. He was an uncommon person.

Burkard Hillebrands, TU Kaiserslautern, Germany.

I feel so sad about the passing away of Dominique. He has been a friend and colleague over a long time. His contributions to the European magnetism community have been outstanding, both regarding his scientific contributions and his contributions for forming the European Magnetism Association, just to name a recent activity among the many others where he has contributed. We will sorely miss Dominique forever.

Luka Kelhar, Josef Stefan Institute, Slovenia.

It was only one single time that I was given an opportunity to meet Mr. Givord and that was in June 2015 at a project meeting in Grenoble. From that meeting I memorized him as being the most sincere, wise and knowledgeable person at the table.

In my memory he will be kept as a true gentleman.

JAOUEN, Synchrotron SOLEIL, France.

J'ai le souvenir que dominique avait accepté de participer comme examinateur lors de mon jury de thèse. J'ai eu l'occasion durant cette période d'interagir alors avec lui et étant plutôt de la communauté du rayonnement synchrotron que du magnétisme il a sut gentiment me pointer mes faiblesses dans ce domaine et me suggérer des pistes pour améliorer mon manuscript.

J'ai gardé le souvenir d'un homme gentil, sincère et un immense scientifique.

Il manguera à notre communauté.

Vladimir V. Popov, Technion - Israel Institute of Technology, Israel.

My the memory of Dominique be blessed.

I was on his lecture on Intermag-2017 in Dublin, and had some talks with him during this conference and was impressed how open, friendly is this man, being at the same time very professional specialist.

JOSE MARIA DE TERESA, CSIC-UNIVERSITY OF ZARAGOZA, SPAIN.

It was very pleasant to interact with Dominique in the framework of the European schools on Magnetism. He was a very kind and easy-going person. The European community working in magnetism owes him a lot! Great job Dominique!

José Luis Sánchez Llamazares, Instituto Potosino de Investigación Científica y Tecnológica A.C., Mexico.

Follows the message I sent to my colleagues last Tuesday (February 5th):

Subject: Sensible pérdida - Dominique Givord

(Text) Hola a todos,

Mediante este breve mensaje les comparto una triste noticia.

El día de ayer la Física del Magnetismo y los Materiales Magnéticos sufrió una pérdida irreparable: nos dejó Dominique Givord, uno de los grandes a nivel mundial en esta área de la Física y de la Ciencia de Materiales.

Dominique, como la mayoría le llamaba, no sólo fue grande por ser un científico brillante y por sus innumerables aportes científicos en ésta área del conocimiento, sino también por su dimensión humana, por ser una gran persona. Quienes tuvimos el privilegio de conocerle percibimos, desde el primer momento, esta rara combinación de sencillez, sabiduría y generosidad que sólo tienen los grandes hombres y que cautiva tu admiración para toda la vida.

Gracias Dominique por todo lo que pudimos aprender de ti, por tu legado, por tu jovialidad y por tendernos siempre tu mano amiga; de esto último los cubanos sabemos muy bien. Tengo la seguridad que seguirás viviendo en el corazón de varias generaciones de científicos que te recordarán, y te recordaremos, como te mereces.

José Luis

R. SURYANARAYANAN, Retired from ICCMO orsay, France.

I had the pleasure of meeting him at several meetings and also corresponded with him since he was a referee to some of my papers. I found him extremely kind and understanding and very helpful. So sad that he is no more with us to serve the magnetism community. Aum santhi, peace.

CheolGi Kim, DGIST, South Korea.

I am so sorry to hear about his passing away.

Even though my research topic is different from his one, I knew that he has contributed the improvement of hard magnet research level, and showed the excellent friendship with many people.

When I met him in Hanoi Vietnam in 2016, he was healthy and gentle.

We will miss him long time, and keep this deep sadness with his colleagues and family.

Ali Ghasemi, Malek Ashtar University of Technology, Iran.

The time is early morning in Iran. I became very sad. God bless his great soul. My first paper for JMMM was accepted under his hand.

Very great man, and very big name in the field of magnetic materials.

Sergey Taskaev, Functional Materials, Russia.

He was a special and wonderful person...

Juan Bartolome, ICMA, Zaragoza, Spain.

It is a great loss for the European Magnetism community, which Dominique helped to build. His personality was attiring, both friendly and critical, and above all cooperative. We shall miss him.

Dr. Muhammad Zahid Ishaque, Micro and Nanomagnetism, Institute Néel, Pakistan.

Dominique Givord, Really a very very great person and eminent scientist. He was very humble and polite to everyone. Its very difficult to pay him tribute in words. God bless him.

Ex-PhD Student (2009-13)

Philip Stamp, Univ of British Columbia (and Caltech), Canada (and USA).

I first got to know Dominique while I was a postdoc in Grenoble at the end of the 1980's; and again a decade later when he and Alain Fontaine tried to recruit me to a position in the CNRS. He was someone who was both interested in and sympathetic to people from outside France - this was quite rare at that time. I was not surprised to hear that he later spent so much time establishing links between the French research community and the rest of the world, in at least 3 different continents. Although I last saw him maybe 20 yrs ago, i can still hear him talking in his infectious and enthusiastic way (we only ever spoke in French together - I wonder now what he would have sounded like in English). Although I never knew him well, Dominique was for me one of the people who made it a pleasure for me to visit Grenoble long after I left.

Chopart, University of Reims Champagne-Ardenne, France.

I had the opportunity to meet Dominique Givord to discuss a research project and I could see how he was very open-minded and how he behaved with a real modesty despite the very broad knowledge that he had accumulated.

Despite the little exchange I had with him, I keep the memory of a nice person, a scientist wishing to enrich his knowledge and ready to help.

Hoang Nam Nhat, Lab. of low dimens. mat. & appl., FEPN, VNU-Univ. Eng. Tech., Hanoi, Vietnam.

The memories suddenly come, and so clearly. That was Dominique, standing at the front door with his smile and open arms when we visited Grenoble some years ago. He was there waiting for us at the station, and taking us around the town by his own car. I still remember him when explaining the origin of the name of Grenoble. If someone asks us how could a French Gentleman be, then this would certainly be Dominique, a man and scientist with crystal mind and frank kindness.

God bless you, Dominique.

Hoang Nam Nhat,

Pham Duc Thang, and

Bach Thanh Cong

Vietnam National University, Hanoi

Moise Bertin Tchokonte Tchoula, University of the Western Cape, South Africa.

Prof. D Givord was an icon in the field of magnetism around the world. The Magnetism community of South Africa deeply regret his passing. Our sincere condolence to his family.

Hamid Kachkachi, Université de Perpignan Via Domitia, PROMES CNRS, France.

When I caught sight of the subject of the email from Magnetism.eu, I was shocked and I could not believe it. As I read on, I realized the bitter reality. The French, European and International community of magnetism has been bereaved of a great name, a sharp and smart mind. I will always remember Dominique from many discussions I had with him as it always was both a pleasure and a challenge to discussion physics with him.

Goodbye Dominique.

Hamid

Alexander N Vasiliev, Low Temperature Physics Department, Moscow State University, Russian Federation.

Dominique was an outstanding scientist and brilliant person.

Alexander Vasiliev

CHEVALIER Bernard, ICMCB-CNRS, Université de Bordeaux, 87 Avenue A. Schweitzer, 33608 Pessac, France.

Sincères condoléances à la famille. J'ai pu apprécié le dynamisme scientifique de Dominique lors de notre collaboration à l'action CEAM. Je garderai en mémoire cette période très agréable

Hongbin Zhang, TU Darmstadt, Germany.

I am deeply sorry to hear it. In the last few month, I have been collecting and reading papers from Prof. Givord in the 70s and 80s on permanent magnets. To me, all the essential aspects had been discussed thoroughly, which renders our attempts nowadays vain.

My sincere condolence to the family!

Tamion, ILM-Lyon, France.

Mes pensées les plus sincères vont à sa famille. En mémoire d'un homme généreux, souriant et talentueux. Il restera toujours un très grand chercheur, qui a tant fait pour la communauté. J'ai eu la chance de travailler un peu avec lui, sa disparition laisse un grand vide dans le monde de la recherche.

Nikolay Kudrevatykh, Ural Federal University after B.N.Yeltcin-first President of Russia, Russian Federation, Yekaterinburg city.

I deeply mourn the passing of the life of such a well-known and erudite magnetologist, what Professor Dominique Givord was.

He undoubtedly belonged to a cohort of prominent scientists - who discovered the unique magnetic properties of rare earth metals, their alloys and intermetallic compounds to the world. Thanks to these

works, mankind has at its disposal new types of high-energy permanent magnets that have truly revolutionized electrical engineering, computer technology and communication technology!

Kingdom you heavenly dear Dominic.

Germán Salazar-Álvarez, Stockholm University, Sweden.

I met Dominique in a few occasions and I was impressed and touched by his human and scientific qualities. He was incredibly accessible for a scientist with his academic stature, always open for discussion and very supportive of young scientists. With his passing it is not only his brightness that leaves us but also his warmth. My sincere condolences for his family.

Ciaran Fowley, Trinity College Dublin / Helmholtz Zentrum Dresden Rossendorf, Ireland / Germany.

I will remember very fondly the December morning where Dominique asked me questions as my external PhD examiner. The entire College was closed and there was ice everywhere. My favorite quote 'Since I got my PhD, its been downhill with them even since'. Rest in Peace Dominique

Vitor Amaral, Departamento de Fisica, Universidade de Aveiro, Portugal.

Je regrette profondément la mort de Dominique. Je l'ai connu à Grenoble en tant qu'étudiant stagiaire au Laboratoire Louis Néel.

Je garde un bon souvenir de sa gentillesse et de sa volonté pour aider, basée sur sa compétence scientifique, partagée avec un énorme enthousiasme. Depuis lors, à Grenoble et lors de plusieurs conférences, nous avons pu nous rencontrer et échanger des expériences, dont j'ai beaucoup profité.

Sa mémoire sera toujours gardée avec amitié.

Roy Chantrell, Physics Department, the University of York, United Kingdom.

I first met Dominique at the 1985 Magnetic Materials and Applications conference, which later became EMMA and finally JEMS. Our first conversation was not about magnetism but about the availability of sandwiches for lunch - that became a continuous joke between us. Over the years his mastery of both experimental and theoretical aspects of magnetism became increasingly obvious and influential. He is rightly regarded as a giant in the field. This was all achieved while remaining an approachable and witty human being who devoted a lot of his enormous energy and enthusiasm to mentoring and bringing on new generations of magneticians. Over the last few years I have enjoyed working with Dominique on the MagHEM project, where discussions with him have been vital in defining the path for development of our atomistic model of Rare Earth permanent magnets. Discussions with Dominique were invariably intense but always enlightening and fun. Goodbye Dominique. I will miss you my friend, but you will always be around in memories and your scientific legacy.

Albert Fert, UMPhy CNRS-Thales, France.

When I met Dominique for the first time, I had immediately a very friendly and warm relationship with him. I liked to talk with him not only about physics (he had clears ideas on many problems) but also about a lot of other aspects of life. We talked about Brazil, Brazilian music, Jorge Amado and Brazilian literature. In the world of scientific research, a relationship that I liked particularly.

Hugues Dreysse, IPCMS, France.

Adieu Dominique. Tu nous manques déjà mais tu resteras toujours dans nos mémoires, pour l'immense scientifique que tu fus et aussi pour tes qualités humaines. Avec toi l'humain est toujours lié au scientifique. Un grand homme nous a quitté. Mais son exemple, même s'il eût fermement refusé ce terme, restera pour les générations à venir.

Antonio Azevedo, UFPE - Recife, Brazil.

I met Dominique many times in magnetism conferences and he was always very friendly. Later, when he spent some time in Rio de Janeiro, he visited us in Recife and we had opportunity to start a scientific interaction. Dominique was one of the best scientists in magnetism that I had opportunity to meet. A unique characteristic of Dominique was his interest to help magnetism groups in countries with little tradition in magnetism studies. His death was an irreparable loss for the world community of magnetism.

Antonio Azevedo

UFPE, Recife, Brazil

Kevin O'Grady, U.of York, UK.

Dominique was a scientist of the highest quality who made a major contribution to knowledge and to our community.

He was also a truly nice, kind man and a friend to us all.

Montserrat Rivas, Universidad de Oviedo, Spain.

C'etait un honneur pour moi de connaître quelqu'un de tell taille humaine et professionnel. Je me souviendra tojour de vous avec tout le respect, l'admiration et l'affection.

Lecio Vicente Montanheiro, UFPR/Lammi, Brazil.

I have got to met prof. Dominique - it was hard no to call him using his first name such an accessible person he was - a few years ago when he was working with the head of the laboratory I work at, as a lab technician, prof. Marlio Bonfim. I recall it was a major national holiday and the department was weirdly empty. We were working on a third-party-published research paper Dominique was quite interested, on the spin current caused by a MOKE on tungsten (and some other metal I don't recall) thin film. I'll tell you, it was quite hard to obtain meaningful data. They tried again weeks later at Rio de Janeiro facilities to obtain success.

I had just recently started my physics career and I was having some trouble understanding MOKE, specially how we would measure the rotation of the electric field. And then, he opened a wide, happy smile, thankful for the opportunity to explain physics once again to someone starting on the field. He asked for paper and pen and enthusiastically started drawing a triangle meaning the signal and its vertical and horizontal components. I understood immediately and we almost laughed at it.

I have met prof. Dominique briefly but he has made his impression on me as a someone still happy to research, teach, help, inquire.

That his grateful attitude towards life and nature remain with us all.

Alexey Dobrynin, Seagate Technology, Northern Ireland.

I was fortunate to work with Dominique for almost 3 years as a postdoctoral researcher. Dominique was a truly exceptional person - extremely kind and supportive to all around him and at the same time very rigorous in his scientific work. His breadth and depth of knowledge in physics and particularly in magnetism was unbelievable and his enthusiasm was contagious for all working with him. People were strongly attracted to Dominique because of this. Metaphorically I would say that he was a rare human magnet with the record energy product. Dominique constantly generated ideas both for original experiments and for modelling of magnetic materials. His ability to explain and to guide his younger colleagues through their work was really remarkable, and I couldn't wish for a better mentor in my professional career. We continued to work together even after I left the group almost 10 years ago, and Dominique's perspective of important trends in magnetism and approaches in research has been defining for my work. The news of Dominique passing away was heartbreaking for me, and I wish to express my deepest sympathy to Dominique's family. I'm sure that Dominique's huge impact in magnetism research will last for many years ahead, and memory about Dominique will live with all his numerous apprentices and colleagues.

Leonid Pourovskii, Ecole Polytechnique, France.

I met Dominique for the first time about one and a half years ago. In spite of this rather short time frame I have come to appreciate a lot his unparalleled expertise in the field of magnetism and remarkable personality. He was able to recall minor details of his 40-years old paper and simultaneously be fully aware of all recent developments in the field. While being gravely ill and in a fragile physical state he was still full of enthusiasm and ideas for new projects. He continued working on our common project virtually until the last day it was physically possible for him. Sadly, he passed away several weeks later. He will be truly missed by his many colleagues and collaborators including myself. My deepest condolences for the family.

Aleksandr Nosov, Institute of Metal Physics of the Ural branch of the Russian Academy of Sciences, Russia.

Dear colleagues,

Please accept our sincere condolences on the departure of Dominique Givord.

In the Institute of Metal Physics of the Ural branch of the Russian Academy of Sciences (IMP, Ekaterinburg, Russia) we knew Dominic as the initiative organizer of European science, the world-class level scientist, who actively worked for a long time in the field of physics of magnetic phenomena.

Many our scientists often met with him to discuss current scientific problems and promising areas of research at numerous international conferences, organized by him, as well as in the L.Neel Laboratory and later in the Institute L.Neel in Grenoble.

The memory of him will forever remain in our hearts.

We express our deep condolences to his family, friends, and staff of the Institute L.Neel.

IMP director, academician of the Russian Academy of Sciences, N.V.Mushnikov,

IMP scientific leader, academician of the Russian Academy of Sciences, V.V.Ustinov,

professor A. P. Nosov.

Jean-Marc Greneche, IMMM UMR CNRS 6283, France.

I remember Dominique as an excellent person and outstanding scientist, always enthousiastic with plenty of nice suggestions to help everyone! His contribution to magnetism and magnetic materials is very important and also to the scientific life of the magnetism international Community!

RIP

JM

Pileni, Sorbonne University, France.

It is a big lost for all of us.

His family can be proud of him

Igor S Dubenko, SIUC, USA.

It is very bad news. My condolence to family and friends.

Javier Díaz, Departamento de Física, Universidad de Oviedo, Spain.

I met Dominique Givord during my thesis work in Grenoble. Curiously, I ended up in a laboratory where some of their members have been friends and colaborators of Dominique. I remember him as someone honest, generous and passionate of what he was doing. Someone close and familiar. I am very shocked by his lost, I think persons like him never dies...

Bernard DIENY, SPINTEC, FRANCE.

Dear Dominique,

I had the good fortune to interact with you on many occasions and especially when I was still at the Louis Néel Laboratory. I learned so much from you at the scientific and human level. I greatly appreciated your kindness, your listening, your search for consensus and at the scientific level, your intuition, your immense culture, your ability to launch new topics, your dynamism and your passion for research. I remember your motto: 'Never postpone for tomorrow what you can do today'. You will remain very present in our community through your scientific impact and the wonderful personal rememberings that we all have.

Manuel Valvidares, ALBA synchrotron laboratory, spain.

Dear Prof Dominique GIVORD,

I learned aspects of magnetism from your review article already when I was a PhD student at Oviedo University under direction of your close friend Prof J. M. Alameda (a former visitor at Louis Néel in the 70s). Later on had the chance to receive at the Hercules school one of the best lectures on magnetism I ever had on my life, which you were given. I have since then admire you as one of the leading persons enlightening new ideas and knowledge on the field of Magnetism. I also have to thank you for kindly offering to be one of the external referees for my PhD work. I will always regret finally you could not be one of the thesis reporters, and that my invitation to visit us to perform one experiment here at ALBA XMCD Beamline came just a bit too late, because it was an opportunity to enjoy some more time and lessons 'de un gran maestro'.

I let here his kind words for his family. Even on difficult times, he was still and individual full of kindness, generosity and sympathy, in addition to one of the most knowledgeable professors. He will be remembered as such by many many of us.

'Cher Manuel.

merci pour ce long et sympathique message.

J'étais resté actif jusqu'au début de cette année. Malheureusement, j'ai de sérieux ennuis de santé découverts récemment

qui m'écartent du travail pour une période indéterminées.

Je regrette beaucoup de ne pouvoir donner une réponse positive à votre offre de collaboration.

Cela aurait été un très grand plaisir, surtout avec Chema, un ami très près de mon coeur.

Je vous souhaite une visite fructueuse au laboratoire cette fin de semaine

et un très bon séminaire.

Bien cordialement,

Dominique Givord'

Blanca Hernando, University of Oviedo, Spain.

Excelent Scientist and better person.

Mehmet Acet, Duisburg-Essen University, Germany.

Dominique fit into his lifetime not only an immense contribution to science but also to the social awareness of the magnetism community worldwide through establishing meetings that became traditional today with his efforts to initiate them. This has given the chance for scientists in the magnetism community throughout the world to become closer and more aware of each other. He will be a figure to look up to for all generations to come with what he has passed on to us.

Spomenka Kobe, Josef Stefan Institute, Slovenia.

Dear Dominique,

Thank you for your outstanding contribution to Science and thank you for being also a Friend and a Great Colleague. It was a great honor to work with you and to know you as a Great Human Being.

Rest in peace,

Spomenka

Massimo Ghidini, University of Parma, Diamond Light Source, University of Cambridge, Italy and UK.

I think I liked Dominique from the first moment I met him. It was june 1992, at the final CEAM meeting in Dublin. Back then, I was a postgraduate student nervously attending his first conference, he was one of the CEAM Godfathers. I was looking for a PhD position, and a few minutes after being introduced to him, he asked if I wanted to go to Grenoble. I found myself replying 'yes!', without hesitation. Actually, I had no idea where Grenoble was or what kind of place it was. Was it in the mountains or by the sea?

Was it a lively student town or a horrible industrial city? The truth is, I really felt it did not matter. From that meeting, Grenoble was chez Dominique and I just wanted to go.

The following three years shaped my life and personality. The Laboratoire L. Neel under Dominique's direction was a lively, warm and exciting place that was literally exploding with young people, some of which later became my colleagues, all of which remain my dear friends.

I quickly learned that with Dominique it was simply not possible to separate life and science. Life was full of science: day and night, weekdays and weekends. A joyful imperative. An inevitable corollary of his overwhelming enthousiasm. However, his science was full of life. He was charismatic as he was empathethic. He was inquisitive about your experiments as he was curious about your personal matters. He was a natural humanist: he taught young people by example that science could and should be a profoundly human, warm and exciting endeavor; he used new scientific projects to forge human links and relationships; he was inspired by those human links and relationships to forge new scientific projects.

Dominique was the most perfect incarnation of the optimism of the will, able to win each and every argument against the pessimism of the intellect. He had a unique ability to help me overcome depressing results a coups de 'ça marche.tu verras, ca va marcher!'. Sometimes if I accompanied bad results with sensible analyses trying to demonstrate that an idea we had previously discussed was not viable, he would nicely say: 'Ne casse pas mon optimisme' and would simply insist that I try harder. And when his persistent optimism was eventually proven right, he would conclude with a cheerful, genuine smile, « t'as vu? Je le savais! ». I really liked that smile. It made me each time try my best to see it.

I have only very fond memories of my Grenoble years. And inevitably Dominique is omnipresent in any of them. Even after all these years, when I start to think to a new problem or simply I am in trouble, I go back and start asking myself how Dominique would think about it. What steps he would undertake. How he would talk to others about it. I guess that's what a true Maestro does. He shapes your way of thinking and of behaving in such a profound way that you can feel his presence inside you for the rest of your life.

I feel incredibly grateful to have met him and I will never forget him. Since 1992 I have been and always will be chez Dominique.

Olivier Sandre, LCPO Univ Bordeaux / CNRS / Bordeaux INP, France.

Having had the pleasure to meet Dominique Givord at several conferences like the 2nd 3NanoBFM in Brasilia, I remember his highly pedagogical talks on magnetic mater, embracing various subjects from micromagnets in biological applications to sustainable magnetic materials for electrical engines. In addition to being a great scientist who made important contributions, he was also a humanist serving the community by fostering communication between scientists of different specialties (for instance the physicists at the Néel institute and the physicians at Clnatec in Grenoble), especially keen towards the young colleagues by helping them to develop their own ideas and to communicate them. As all researchers on magnetic sciences worldwide, I will miss the human being, but his scientific heritage and the souvenir of his dedication to the community are stored forever in our memories.

Faroog Hussain Bhat, Department of Physics, IUST, Awantipora, India.

May Dominique's soul rest in peace. My deep condolences to his family. His contribution to Physics in general and Magnetism in particular will be remembered for ages to come.

Olivier FRUCHART, SPINTEC, CNRS, France.

Dear Dominique,

This is with great sadness that I realize that our paths will cross each other no more in the future. When I turn back to my path in Magnetism, I realize that your imprint is present at many key stages. You have been the one who drove me into Magnetism, as early as 1992 for a four-week License internship, along with Oran Mc Grath. As a weird coincidence, you were at that time the very same age I am now that you are leaving us. Later on you acted as my PhD adviser, and you were also the one who secured my post-doctoral position with Jürgen Kischner in thirty seconds on a phone call to Jürgen; I remember that very special moment in your office, things seemed so easy! I also owe you my role in the European School on Magnetism, as you contributed to the roots of this school by fostering the French-Romanian links, and also inviting me to lecture in 2003. After that time I never left the School, and progressively took part in its organization, alongside Olivier Isnard and Claudine Lacroix.

I remember these early days of Laboratoire Louis Néel as those of a family, in which all could understand and support others, and for which you acted as a sort of father. My regret is that we did not create the opportunity to share some research after my PhD, although we have always remained in close proximity. I have the suspicion that perhaps we respected each other much, so that we were reluctant to walk on the path of each other, for the sake of respecting each other contribution and independence. In the end, I am grateful that you invited me to contribute to your book alongside Claudine and Aurélien, and I will do my best to finalize this work.

Given the spread and strength of your imprint, you do not belong to the past Dominique. Your spirit of curiosity, community-building, honesty and friendship will keep guiding our path for years and decades to come. Travel in peace, my friend.

Olivier;

Sadamichi Maekawa, RIKEN CEMS, Japan.

It was with great sorrow that I learned Dominique had passed away.

We were together at IUPAP Magnetism Commission.

He was always helpful.

My sympathies are with his relatives and friends.

Emil Burzo, Babes-Bolyai University, Romania.

La première rencontre avec Dominique a eu lieu il y a un demi-siècle, pendant mon séjour au laboratoire Louis Néel. Ce fut le début d'une amitié et collaboration intermittente mais s'intensifiant au fil des années, particulièrement après 1990. En tant que scientifique, Dominique a été l'un des pionniers de l'étude des composés de terre-rares, avec des résultats scientifiques impressionnants. Il a été, en même temps, un exemple de scientifique, pour sa passion pour la recherche, les qualités d'innovateur, la profondeur des connaissances, particulièrement du magnétisme, l'implication personnelle pour le travail.

Dominique a collaboré avec mon université, a participé aux actions très fructueuses des échanges des étudiants, des chercheurs, l'organisation régulière des écoles de magnétisme, qui ont devenu internationales, ainsi que la mise en place d'un programme commun DEA en physique. Dominique a fait partie du corps des professeurs de l'Université 'Babes-Bolyai' de Cluj-Napoca, étant

Docteur Honoris Causa. Il laissera, à tous les membres de notre Université qui ont eu la chance de le côtoyer tout au long des années, le souvenir d'un scientifique intègre, droit et rigoureux.

Le décès de Dominique est une grande perte pour la communauté scientifique internationale. La mémoire de Dominique restera dans nos coeurs par ces oeuvres, pour sa prodigieuse activité scientifiques ainsi que pour l'amitié manifesté au cours des années.

dr. Alexander Bazhan, P.L. Kapitza Institute for Physical Problems, RAS, Moscow, Russia.

With deep regret, I learned about the demise of Outstanding Physicist of France, Professor Dominique GIVORD. Many times We met at Magnetic Conferences and discussed interesting problems of the Physics of Magnetism.

Please, accept my most sincere condolences to the family of Professor Dominique GIVORD and to the everyone who knew this Wonderful Person.

Dr. A.Bazhan

Jose M. Alameda, University of Oviedo, Spain.

Everyone who knew him agreed that Dominique Givord combined scientific and human excellence at the same time. In my case, I also feel privileged to have met him for the first time more than 40 years ago, when we were both young scientists. To have worked with him on subjects that we were both passionate about and having been his friend for so many years. Privileged also for feeling your support in difficult times. For me and my family is someone unforgettable. We will miss him.

A bientôt mon ami, mon copain. Mon frère.

César de Julián Fernández, Istituto dei Materiali per l'Elettronica e il Magnetismo - CNR, Parma, Italia.

Quiero expresar mi más sentido pésame a la familia y amigos de Dominique Givord. Conocí a Dominique cuando empecé en el mundo de Magnetismo, lavando vasos junto a él en una reunión, fue mi mentor en el laboratorio Louis Néel y después fue la siempre deseada contraparte en cualquier discusión científica. Con su desaparición me doy cuenta de cuantos recuerdos tengo todavía de él. Trabaje con él en uno de sus muchos proyectos personales donde puso genio, ilusión y un poco de inconsciencia: crecer las mejores películas delgadas domando el plasma con campos magnéticos. Recuerdo su pasión y empuje cuando trabajamos y discutíamos, su forma de razonar y explicar sus ideas, argumentando conceptos sencillos pero precisos y utilizando sus manos y realizando dibujos casi infantiles para ilustrarlas. En ese periodo Dominique tenía también que lidiar como Director del Laboratorio Louis Néel. El Laboratorio era un fermento de nuevas ideas, conceptos y aplicaciones que ahora son pilares en el Magnetismo contemporáneo. Con Dominique el Laboratorio era en continuo movimiento, centro de encuentros, reuniones e intercambios entre científicos de todos los lugares del mundo. Compartí entonces, y sigo compartiendo esa visión comprometida, multifacética y multicultural de desarrollar el conocimiento.

Y mezclado con todos recuerdos, me queda sobre todo profundamente marcado su persona, siempre con un trato directo, sincero, amigable, alegre y esas grandes risas!. Me faltarás Dominique!. César

I want to express my more felt condolence to the family and friends of Dominique Givord. I knew Dominique when I began in the world of Magnetism, washing glasses together with him in a meeting, he was my mentor in my stage in the laboratory Louis Néel and after, he was always the wished counterpart in any scientific discussion. With his death I realize all the memories still I have of him. Be employed with him at one of his many personal projects where genius put, passion and a bit of

unconsciousness: the growth of the best magnetic films by taming the plasma with magnetic fields. I remember his passion and push when we worked and we were discussing, his way of reasoning and explaining his ideas, arguing in a simple way but with precise concepts and using the hands and performing almost infantile drawings to illustrate his ideas. In that period Dominique also had to deal as Director of Louis Néel Laboratory. The Laboratory was a ferment of new ideas, concepts and applications that are now pillars in contemporary Magnetism. With Dominique the Lab was in continuous movement, center of meetings and exchanges between scientists from all over the world. I shared then, and I continue to share that committed, multifaceted and multicultural way of developing knowledge.

And mixed with all these memories I am deeply marked by the memory of his person, always with a direct, sincere, friendly, cheerful and with those great laughs! I'll miss you Dominique! César

Anna Llobet, Los Alamos Natioinal Laboratory, US.

Dominique Givord has been an important role model in my life. I was warmly welcomed to Laboratoire Louis Neel many years ago and I can't imagine a better place I could have been. Dominique, not only fostered the love for his passion in magnetism and physics but he lead the laboratory to be a place of collaboration, curiosity, diversity and friendship. He fostered diversity through the numerous efforts like the Franco-Rumanian collaboration that impacted a new generation of scientists now spread all over the world.

Dominique, you will be missed.

H. Sepehri-Amin, Senior Researcher, NIMS, Tsukuba, Japan.

Indeed it is very very sad news that Dominique is not with us. I had a chance to know him from the early stage of my carrier and learning a lot from him. He was a role model for me not only as a great researcher and teacher but also his wonderful personality. Rest in peace Sensei, you will be remembered by all of us.

Michel Viret, CEA/SPEC, France.

Dominique has always been a model for me, both in his very human way of dealing with people as well as his creativity and enthousiasm for his research. I hope we share common points, at least, it is my goal.

Hadrien Mayaffre and Marc-Henri Julien, Laboratoire National des Champs Magnétiques Intenses, Grenoble (LNCMI), France.

It was an honour to both meet and know Dominique and a pleasure to talk about Mn2Au and antiferromagnetic spintronics with him. We were as charmed by his personality as we were impressed by his physical intuition. His kindness, simplicity, curiosity and enthusiasm gave us the refreshing impression of collaborating with a youngster, not with an old stager of magnetism. What a great example for all of us! He will be sadly missed by the Grenoble community, and obviously well beyond. Our thoughts are with his family.

Federico Cebollada, Universidad Politécnica de Madrid, Spain.

When I was at the beginning of my scientific career in a newly formed research team in Madrid, Dominique was the key person who offered me the possibility to face new scientific challenges and who strongly supported our work. In this sense, I can say that Dominque opened my mind and helped me to grow as a scientist. I still recall that, at the time he was de Director the L. Néel Lab., he always had the

time to come down to the arena to discuss with us the specific details of the measurements and models whenever we required him. He was the kind of a man always willing to support young, emerging people and groups everywhere in the world, never caring about her personal benefits. This lead him to become a really appreciated scientific leader not just because of the quality of his research but, most important, by his quality as a person. I can only say that I feel deep touched by the news of Dominque's decease.

Michaël Darques, France.

C'est avec une immense tristesse que j'apprends aujourd'hui la disparition de Dominique Givord.

J'ai eu la chance partager le même bureau pendant près de deux ans où j'ai profité de ses incroyables talents de physicien et de ses connaissances qui semblaient sans limite sur tout ce qui touche au magnétisme.

Dominique faisait toujours preuve de curiosité et d'enthousiasme quel que soit le sujet. Son énergie était contagieuse et une simple discussion avec lui suffisait à redonner de la motivation et l'envie de travailler pour de longues semaines. En quelques phrases il pouvait saisir la complexité des sujets auxquels nous étions confrontés et il a toujours été d'une aide précieuse, n'hésitant jamais à sacrifier de son temps pour les autres.

C'était également un joyeux compagnon de bureau, toujours souriant et prêt à rire de bon coeur.

Je veux aussi souligner sa gentillesse, sa bienveillance, son écoute attentive en toute circonstance: Dominique était une belle âme et un modèle.

J'adresse mes pensées émues à sa famille, amis et collègues grenoblois.

Manuel Vazquez, Instituto de Ciencia de Materiales de Madrid, España.

It has been with very deep sorrow, I have known of the departure of Dominique.

I would like to send my most sincere condoleances to his family.

But also, to the magnetic community in Grenoble, in France overall.

I have known Dominique from more than 30 years.

He has been key scientist, a brilliant magneticien who has contributed tremendously to the field of magnetism and magnetic nanostructures, and to its internationalization to many countries, developed as well as less developed.

And such a kind and close person. He was always ready to discuss on magnetism, and so easy to talk and communicate.

Magnetism and the international magnetic community, we are in mourning.

Manuel Vazquez

Dubus Jean-Marc, Valeo Electrification System, France.

It is with great emotion and sadness that I learned of Dominic's death. I met him in 2011 during the rare earths crisis, when Valeo was looking for an Expert who could help us in the search for alternatives to heavy rare earths. Dominique was good advice, opened doors for us, accompanied us to Japan. He taught me a lot about neodymium iron boron magnets. Always nice, available, al list, good advice. We have together collaborated in research projects on sintering powder, it is he who opened my community to European and Japanese researchers working on permanent magnets, my integrated in the European project ROMEO, contribute to what I am today.

He was always the first to answer me when while doing my watch on the technologies I found something interesting to me to direct, to give me the references to consult, sometimes even he reacted and interpelait the authors by quoting them with references very previous .

Thanks to his teaching I am now recognized as an expert, consulted by the European Commission during the examination of proposals responding to calls for projects.

This is a major loss for the community.

My condolences to Vitoria, to its teams from France, Brazil and elsewhere, and in particular to Nora and Sophie with whom I have and I will have multiple collaborations.

A last word for you Dominique, I'm losing a friend and a mentor, we'll miss you.

Hartmut Zabel, Runr-University Bochum, Germany.

Dear Dominique,

Last time that we met was on a cold December morning 2016 when we both took a taxi to the Ekaterinburg airport after attending a foresight meeting on magnetism at the Institute of Metal Physics. You were heading off to Brazil while I was simply returning to Germany. Our discussion was on the antiferromagnetic properties of Mn2Au and you encouraged me continuing our XMLD studies. Indeed, this short discussion was the most constructive and supportive. I am particularly grateful for your splendid neutron scattering work on Mn2Au, which laid the foundation for all subsequent work by many researchers in the field of antiferromagnetic spintronics using this particular metal compound, including the PhD thesis which I supervised at that time. Your expertise, insight, and inspiration will always be remembered. Your open, friendly and cooperative attitude will be missed forever.

Hartmut

David Arnold, University of Florida, USA.

I interacted with Dominique during my sabbatical visit to Grenoble in 2011. Beyond his technical expertise, what I remember most about Dominique was his remarkable kindness. It's my privilege to honor and remember this wonderful man.

Dimitrios Niarchos, INN NCSRDemokritos and AMEN Technologies, Greece.

Many thanks for guiding me through my career

God bless your soul

PEDRO LANA GASTELOIS, LFA /CDTN, Brasil.

I ve never met someone that have such a pleasure and fascination in discussing physics. At the same time that his eyes shinned like an enchanted child his familiarity with the theory behind made every discussion so interesting and profound. He was a magician that illuminated our thoughts and made physics extremely beautiful. In addition, his respect and consideration with others, and their work, made him a very special human being.

Richard Evans, University of York, UK.

Dominique was a great scientist and friend and I will be forever grateful to him for educating me on how to properly model and understand permanent magnets. He always asked tough questions but in the most supportive and encouraging way. I will always fondly remember the deep and challenging discussions on many different topics over the years that I knew him. His passion for science and discovery was seemingly unending and I will sincerely miss him, but with very fond memories.

Oliver Gutfleisch, TU Darmstadt, Germany.

Dominique has been a great teacher and inspiration for many including me. He was a sensei in the true sense and spirit, one of the great and very rare educators in magnetism, always committed to science and the wish to help others to understand. His scientific achievements have been acknowledged widely; for me his deep understanding of rare earth magnetism and coercivity mechanisms were probably the topics were I profited most in my work from the discussions with him. I was fortunate to work with him in a number of projects over many years and I could always count on his support and enthusiasm. Apart from his never ending curiosity and his willingness to actually listen, it was Dominique's always authentic and humble personality which I appreciated so much. That really made him quite different from many other successful scientists. He was not after enjoying more fame and he was always happy to help the 'small' guys. And we could talk about many other things, going well beyond science.

Merci, Dominique!

André Thiaville, Laboratoire de Physique des Solides, Orsay, France.

I would like to thank Dominique for his actions to encourage me to go forward, at several stages of my career.

His actions to structure the european community of Magnetism are impressive, and we can benefit from them now

On the national level laso, he has not hesitated to face tough challenges, for the overall progress of Science in France.

Dino Fiorani, Institute of Structure of Matter - National Research Council, Italy.

Dominique was an outstanding scientist and for me also a dear friend.

I had frequent contacts with him and many exchanges of ideas about JEMS and the future of the European Magnetism Association. This gave me the possibility to know him very well and to appreciate his human qualities.

He was a very kind, open and available person to everybody. I'll miss my dear friend Dominique.

John Chapman, United Kingdom.

Our paths crossed on numerous occasions - at conferences, as participants in European schemes, on committees, or simply as visitors in each others laboratory. In all cases, I was left with admiration for Dominique's boundless energy, his ingenuity in finding solutions to tricky (sometimes almost intractable) problems, his patience in explaining to those slower on the uptake, and most importantly the good humour he displayed throughout. I feel privileged to have benefitted from the many interactions I had with him. Along with the rest of the communities he served, I shall miss him greatly.

Karl Sandeman, City University of New York, USA.

I had the pleasure of collaborating with Dominique when I was a visiting researcher at the Institut Néel for two months in 2017. Dominique was very generous with his time and I feel extremely fortunate to have been able to benefit from his vast knowledge and understanding of magnetism. He was always willing to discuss even the most embryonic of my ideas. I will greatly miss his insightful conversations.

Aside from work, I will always remember Dominique's kind introduction to Grenoble and its surroundings, including a potted history of the city and its street names and many suggestions for local excursions with my family. He could not have been more thoughtful.

Vassil Skumryev, Institució Catalana de Recerca i Estudis Avancats (ICREA), and Universitat Autònoma de Barcelona, Spain.

Dominique was one of the few true gentlemen that I met in science, one of the most gifted scientists with whom I had the privilege to collaborate. Dominique's humanity gave me a strength in some of the most difficult moments in my personal life. The last emails we exchanged with Dominique were at the very end of last December. He was very enthusiastic and eager to proceed with the experiments he had suggested....

Yuepeng Zhang, Argonne National Lab

Dominique was a great scientist, and also a great person and mentor. He was genuine, caring, and generous. His influence on multiple generations was profound. His deeply human qualities were passed in both spirit and practice across multiple countries and regions, like a wave, enriching their lives at a deeply existential level, giving them an expanded sense of what it means to be human.

Alberto Bollero, Lucas Pérez, Julio Camarero, Rodolfo Miranda, IMDEA nanociencia & UAM

Dear colleagues,

We have just heard about the unfortunate news of Dominique's loss and we want to express our condolences. Those of us who had the honor of knowing him, we will always remember him with respect and affection, as a great scientist and an excellent person, who was always willing to advise, teach and enhance the capacities of oneself.

IMDEA Nanociencia joins the desolation of the international magnetism community. Dominique's essential contributions to magnetism are left for future generations and, undoubtedly, will not go unnoticed. Dominique will be remembered in the Spanish magnetic community for his immense scientific and formative work, but especially for his closeness, humanity, cheerfulness and for having always extended a helping hand.

With our deepest condolences,