



## From The President

By Takao Suzuki, President of the Magnetics Society

Greetings and I hope this message finds you all well!

The time flies so fast, and now my term as the President remains for less than three months. This is the last column for me to write.



I recall a few things that happened during my term as president. The first one is that immediately after I took office, Japan's devastating double disasters of the earthquake and tsunami occurred in March 2011, followed by the nuclear power-plant crisis in Fukushima, Japan. We all worried seriously about our friends and colleagues there, and we also were deeply concerned about the long-lasting effects of the disaster that might affect the people of Japan. These events occurred just

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## 6th IEEE Magnetics Society Summer School

By Mingzhong Wu, Education Committee Chair



The 6th IEEE Magnetics Society Summer School will be held in Assisi, a Middle Ages town close to the University of Perugia, Italy during June 9-14, 2013. The school is designed for graduate students studying magnetism. It will consist of lectures by international experts and will include poster presentations by

participating graduate students. The program will cover both fundamentals and advanced topics in magnetism.

Financial support will be awarded to approximately 75 students from around the world. Awardees will be provided with free room and board and will be reimbursed for most of the cost of economy round trip airfares or equivalent ground transportations.

The Summer School is open to current MS or PhD students who are members of the IEEE Magnetics Society (at the time of attendance) and have not attended previous summer schools. The application requires a recommendation from a faculty member. Preference will be given to students who have a recommendation from a current member of IEEE Magnetics Society.

For more information about the school and application, please visit:

<http://summerschool.ieeemagnetics.org>

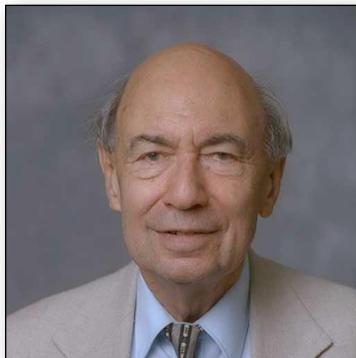
Application deadline: December 15, 2012. Award announcement date: January 20, 2013.

# Fritz J. Friedlaender (1925-2012)

Submitted by John Nyenhuis

Fritz Josef Friedlaender, 87, died at home on October 3, 2012. His loving wife of 43 years, Gisela, and his two sons, Daniel and Rolf, were by his side.

Fritz Friedlaender was born May 7, 1925 in Freiburg in Breisgau, Germany to Ludwig Friedlaender and Frieda Murzynski. Due to Nazi persecution, his family fled to Bombay, India in 1938. He attended the St. Peter's Boarding School in Panchgani, and then worked as a winding shop foreman in Bombay. In 1948, he arrived in the United States, settling with family in Pittsburgh, and commenced engineering studies at the Carnegie Institute of Technology (now Carnegie Mellon University), where he received his BS degree in 1951, and PhD in 1955. He became a US citizen in 1953.



After a year at Columbia University in New York, he joined the faculty of Electrical and Computer Engineering at Purdue University in 1955, becoming a full professor in 1962 and retiring in 2000 as Professor Emeritus.

Fritz was a world-renowned expert in the field of magnetism. His research focused on engineering applications of magnetic domains, the regions of uniform magnetization in a magnetic material; he and his students made significant contributions for high speed data storage for computers. The technologies for data storage that he explored included ferrite cores, thin magnetic films made from iron-nickel alloys, and magnetic bubble domains in rare earth garnet films. He also investigated high gradient magnetic separation (HGMS). His research led to over 200 publications and presentations at technical conferences, and countless lectures at institutions throughout the world.

Inseparable from his research, was his commitment to teaching, both in the lab and the classroom. Under his supervision, he mentored numerous PhD students, many of whom became School of Engineering distinguished alumni.

He received many honors and awards in recognition of his accomplishments. Among them are Fellow of the Institute of Electrical and Electronic Engineers (IEEE); IEEE Centennial Medal; IEEE Magnetics Society Achievement Award; IEEE Magnetics Society Distinguished Lecturer; Honorary Doctorate

from the Ruhr University in Germany; Fellow of the American Physical Society; Honorary Member of the Magnetics Society of Japan; and IEEE Third Millennium Medal.

Fritz was one of the founding members and a charismatic leader of the IEEE Magnetics Society and its annual INTERMAG conference, which brings together magneticians from around the globe. He served in Magnetics Society governance for his entire career, including as President in 1977-78.

This forum for international collaboration was immensely important to him, and this was reflected by the many professional and personal relationships he developed with scientists throughout the world, notably from Germany, Japan, and the United Kingdom. He took sabbaticals in Germany and Israel, and developed an exchange program for international students through the Electrical Engineering Department at Purdue.

Fritz frequently invited researchers to work in his laboratory at Purdue, and many were invited to his home for conversation and wonderful food served by his wife, Gisela. Early in his career, Fritz started a special tradition: he dedicated part of a wall in the basement of his home for these visiting scientists to sign, as an honorary Wall of Magnetism. These signatures now number in the hundreds, dating back almost a half a century.

Fritz was a congregation member of Sons of Abraham Synagogue in Lafayette. He was also a member of B'nai B'rith, as well as a board member of the Purdue Hillel Foundation, and numerous professional societies. He enjoyed traveling, photography, building and fixing anything mechanical or electrical (including the entire low-voltage wiring for his house), and post-retirement, spending winters in St. Croix. He also became very engaged in his genealogical history later in life, discovering various branches of extended relatives through his research.

He is survived by his wife, Gisela; and two sons: Daniel, of Philadelphia, PA; and Rolf, of Chicago, IL. His parents and his brother, Dr. Friedel Friedlaender, preceded him in death.

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one month before the Taipei INTERMAG 2011, which took place in April. Despite the short time left before the conference, the conference management committee, led by General Chairs Ching-Ray Chang and Bruce Terris, took very appropriate actions to encourage people to attend the INTERMAG 2011. They offered partial support for traveling from Japan, discounted registration fees, and they also waived the cancellation fee of the registration for Japanese attendees. Thanks to everyone's efforts, the conference successfully took place with more than 1,300 attendees from 43 countries, and with a surplus of more than \$65k.

The second thing that occurred was the sudden death of Dr. Doug Lavers. In the summer of 2011, we lost our friend Doug who passed away because of an accident. He will be greatly missed as a friend and colleague; at the time of his death, he was the chair of the Conference Executive Committee (CEC).

Doug was one of the leading persons in our Magnetics Society who tirelessly worked hard for the Society. Since Doug was the individual who handled all of our conferences, it was very difficult to find someone to take over this position. After spending a few weeks searching, Massimo Pasquale, then the Chair of the Publications Committee, kindly accepted the CEC position. Massimo had much experience in running several major conferences including the joint MMM/INTERMAG conference in 2009, and thus is well qualified for this position.

Ron Goldfarb (then an AdCom member) also accepted to take charge of the Publication Committee again. Ron had been the Chair of this Committee for many years before Massimo took over the position, and thus has had much knowledge not only on publications, but also about the entire Society's activities. I was very grateful to both Massimo and Ron for their acceptance of these important responsibilities.

Doug worked for more than 20 years for the Magnetics Society as a volunteer. Our Society, like many similar organizations, owes much to the work of volunteers, and it is indispensable to have people like Doug who are motivated and devote precious time as the volunteers for the organization unit. Of course it is not easy for anyone to work as a volunteer, unless the volunteer be recognized for that work by his/her boss. This may be more serious for those in industries than academia. Nevertheless, we

must encourage and welcome many volunteers to serve on committees so that they can play a major role in the Society.

As mentioned before, the IEEE now has a total membership of more than 400,000 from more than 160 countries. It is true that the IEEE is the largest technical professional society in the world. I would like to emphasize that all those activities are due to many volunteers who are ceaselessly working for their Societies, and I believe the IEEE headquarters recognizes those volunteers' hard work; however, I must confess that there is room to be improved in this aspect.

One of the things I have been thinking that needs improvement, is the visibility of our Magnetics Society. Our Society has about 3,000 members including students, which has been nearly the same for the past few years. This fact may reflect somehow a lack of visibility of our Society.

One of the strategies we have taken to improve visibility is the establishment of Sister Society relationships with other magnetic societies abroad. In this way, we can get more publicity and visibility through mutual collaborations. We now have four Sister Societies (Taiwan, South Korea, Japan and Spain), and we need more. Another way may be that as we are having an annual meeting of the Magnetics Society at every INTERMAG conference, that is a very good chance to advertise our Society to the audience. To my regret, the audience has not been as many as we may have wished, but I am confident that the next president, Liesl Folks, will do a great job handling this annual meeting.

Before closing this article, I would like to thank sincerely the officers (President-Elect Liesl Folks, Treasurer/Secretary Bruce Terris, and Past-President Randy Victora) and all the standing committee chairs and the AdCom members who have supported me in many ways. Without their support I would not have been able to finish my job as the President.

I also extend my thanks to Massimo Pasquale (Conference Executive Committee Chair), Ron Goldfarb (Publications Chair), Bruce Gurney (Honors and Awards), Albrecht Jander and Mingzhong Wu (former and present Education Committee Chairs, respectively), Hiroaki Muraoka (Chapters), Peter Fischer (Membership), Kaizhong Gao (Technical Committee), Vince Harris (DL coordinator), Jan Ulrich and Tom Thomson (former and present Finance Chairs, respectively), Chih-Huang

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Lai (Publicity) and Burkard Hillebrands (AdHoc Committee on guiding principles). Also, my sincere thanks are due to Gareth Hatch (Newsletter Editor), who has been always patient in waiting for my late submissions to the Newsletter!

Finally, but not least, I would like to thank Diane Melton, the Executive Director, and also the Conference Coordinator. She has been very helpful and supportive during my presidency,

especially in preparations before and during the AdCom meetings.

I wish you all much continued success, and thank you for all of your support during my presidency!

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## REPM'12 Meeting Review

By Gareth Hatch, Newsletter Editor

The 22nd International Workshop on Rare-Earth Permanent Magnets and their Applications (REPM'12) was held at the Brick Hall in Nagasaki, Japan during September 2-5, 2012. The Workshop was co-chaired by Hirotohi Fukunaga (Nagasaki University) and Satoshi Sugimoto (Tohoku University). The Honorary Chairs were Masanari Iketani (Iketani Science and Technology Foundation) and Masuo Okada (Hachinohe National College of Technology).

The Workshop included sessions on raw materials & resources, processing & properties of Nd-Fe-B and Sm-Co, microstructure & properties, coercivity & physical properties, nanocomposite & film magnets and magnet applications.

Over 270 attendees came from 19 different countries, which included 15 invited talks. The first session on raw-materials & resources took place within the framework of the 22nd Iketani Conference.

The meeting was very well organized and included a Banquet which featured the excellent dragon dancers of the Nagasaki Girls High School. The Karl J. Strnat Memorial Lecture was given by Masaaki Hamano (Society of Non-Traditional Technology). Prior to the banquet, George Hadjipanayis (University of Delaware) gave a Special Lecture titled "Permanent Magnets: The Key to Modern Technology."



## Conference Calendar

Oct 31 - Nov 2, 2012 Asia-Pacific Magnetic Recording Conference APMRC 2012  
Singapore  
Web site: [apmrc2012.dsi.a-star.edu.sg](http://apmrc2012.dsi.a-star.edu.sg)

Nov 11-14, 2012 Fifteenth Biennial IEEE Conference on Electromagnetic Field Computation  
Oita, Japan  
Web site: [www.cefc2012.org](http://www.cefc2012.org)

Nov 14-19, 2012 International Conference on Megagauss Magnetic Field Generation  
Maui, HI, USA  
Web site: [www.megagauss.org](http://www.megagauss.org)

Dec 18-21, 2012 Sixth International Conference on Sensing Technology ICST 2012  
Kolkata, India  
Website: [seat.massey.ac.nz/conferences/icst2012/](http://seat.massey.ac.nz/conferences/icst2012/)

Jan 14-18, 2013 12th Joint MMM/INTERMAG Conference  
Chicago, IL, USA  
Web site: [www.magnetism.org](http://www.magnetism.org)

Feb 7-8, 2013 Magnetics 2013  
Orlando, FL, USA  
Web site: [www.magneticsmagazine.com/conferences/](http://www.magneticsmagazine.com/conferences/)

Apr 8-12, 2013 Latin American Workshop on Magnetism, Magnetic Materials & Applications  
Buenos Aires, Argentina  
Web site: [law3m.fisica.org.ar](http://law3m.fisica.org.ar)

To list your conference in the Newsletter Conference Calendar, please contact the Editor

## Don't Forget the Magnetics Society at Renewal Time!

By Peter Fischer, Membership Committee Chair

With another year coming its end, your renewal process for the IEEE Magnetics society is just around the corner.

Make sure, that when you renew for another year, to include the Magnetics Society in addition to your general IEEE membership. This will secure your full benefits from our society, such as eligibility for voting for members of our Administrative

Committee and on-line access to *IEEE Transactions on Magnetics* and *IEEE Magnetics Letters*.

Should you have any questions about the renewal process or if you experience any problems with your membership, please contact our membership committee chair via email at [peter.fischer@ieee.org](mailto:peter.fischer@ieee.org).

### Get in touch...

We're always interested to hear from Newsletter readers... what you like, what you don't like - what you'd like to see more of in the Newsletter. Just letting us know that you're a reader would be great too!

Drop the Editor a line at: [g.p.hatch@ieee.org](mailto:g.p.hatch@ieee.org)

## New Senior Members

Senior Member is the highest grade for which IEEE members can apply. The following member of the IEEE Magnetics Society was recently elevated to the grade of Senior Member.

Sep 2012: Massimiliano D Aquino.

For further information, visit the IEEE Web site at:

[http://www.ieee.org/membership\\_services/membership/grade\\_elevation.html](http://www.ieee.org/membership_services/membership/grade_elevation.html)

## Stay with the Magnetics Society After You Graduate...

By Peter Fischer, Membership Committee Chair

You joined the Magnetics Society as a student member and really enjoyed being part of the largest professional magnetics organization. Now that you have graduated, you would like to stay with the Society - but you realize that the membership fees for a full member are substantially higher than for a student member, which makes you think twice, whether it is worth staying with us or maybe come back at a later stage in your career.

The Magnetics Society would like to help you with your decision to continuously stay with us by offering financial support to our younger loyal members. Those will be eligible to receive a 50% refund of their full IEEE and Magnetics Society membership dues for the first 5 years being a full member.

To receive this rebate, you need to fulfill the following requirements:

- Proof of active membership as a student member of the IEEE and the Magnetics Society for at least the 2 years preceding the year of your graduation;
- Proof of payment of your annual dues for the IEEE and Magnetics Society for the year you are applying for the rebate; and
- Proof that you had no lapse in membership of IEEE and Magnetics Society since you first joined the IEEE and the Magnetics Society.

This rebate cannot be combined with any other applicable rebate and only applies for the current year. If you would like to request this rebate, please email a copy of your proof of eligibility (membership and payment for the current year and any preceding years to proof eligibility, see above) to [peter.fischer@ieee.org](mailto:peter.fischer@ieee.org).

Deadline for the application for the 2012 rebate is November 30, 2012.

## About The Newsletter

The purpose of the IEEE Magnetics Society Newsletter is to publicize activities, conferences, workshops and other information of interest to the Society's members and other technical people in the general area of applied magnetics. Manuscripts are solicited from Magnetics Society members, conference organizers, society officers and other volunteers, local chapters, and other individuals with relevant material.

The Newsletter is published in January, April, July and October electronically on the Magnetics Society webpage at [www.ieeemagnetics.org](http://www.ieeemagnetics.org). Submission deadlines are January 1, April 1, July 1, and October 1 respectively.

Please send articles, letters and other contributions to the Newsletter Editor:

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