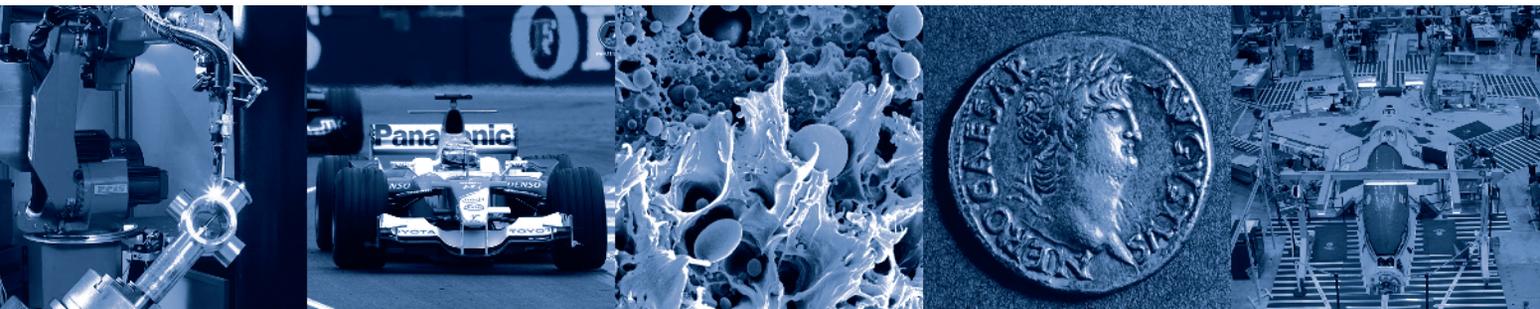




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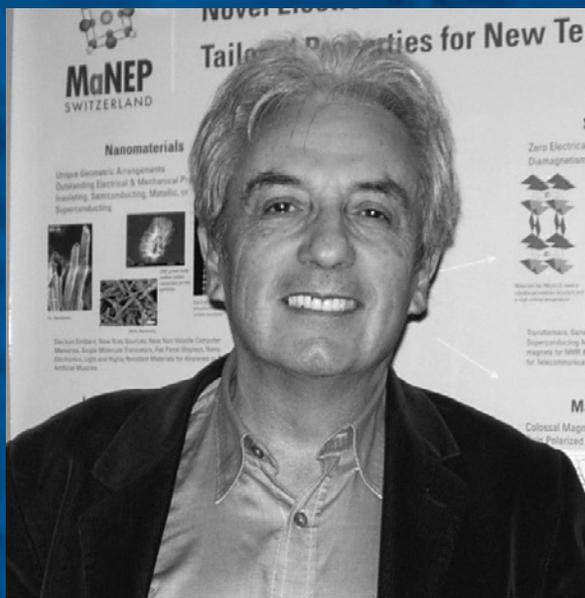
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## It was said...



## Albert Fert

**Professor of Physics at Université Paris-Sud,  
France  
The 2007 Nobel Laureate in Physics**

“(...)I want also to tell you how another person, from Sweden, played certainly an important role for my orientation. When I was at the university, I liked physics, but I liked the arts too, I was a good photographer, I liked cinema, I wrote and I shot a film. My main inspiration was Ingmar Bergman, my god was Bergman. I remember trying to express the feelings I wanted to express by black and white close-up and slow panning shots, inspired by the first films of Bergman, Sommarlek, Sommaren med Monika, Smultronstället. But, when I saw my film, it was not at all expressing what I wanted to express, and I realized that, unfortunately, I was at light years from what I had seen in Bergman’s films. But I could remember that I had some skills in physics, I began a PhD and I found that the research can be a very creative work too. The discovery of new and beautiful landscapes in the field of knowledge was also fascinating, and this led me to be here today, partly thanks to the inaccessibility of the genius of Ingmar Bergman.(...)”

From Albert Fert’s speech at the Nobel Banquet on 10<sup>th</sup> December 2007 in Stockholm, Sweden

(according to the Official Web Site of the Nobel Foundation)

Photo: MaNEP Geneva, Switzerland

# Editorial

Yearly the most important event for the World Academy of Materials and Manufacturing Engineering WAMME is its General Assembly, which usually accompanies the subsequent International Scientific Conference on Achievements in Mechanical and Materials Engineering AMME, organized by the WAMME Academy with the cooperation of the Association of Computational Materials Science and Surface Engineering ACMS&SE, the Metallic Materials Section of the Materials Science Committee of the Polish Academy of Sciences and the Institute of Engineering Materials and Biomaterials of the Silesian University of Technology in Gliwice, Poland. This year both the General Assembly of the WAMME Academy and the 16<sup>th</sup> Conference AMME'2008 took place on 22<sup>nd</sup> to 25<sup>th</sup> June in Ryn on Mazuria in North-East Poland, recognised as one of the most attractive tourist and landscape regions in Europe. In the makeup of the Mazuria Lake District, the Region of Great Mazurian Lakes, commonly called as the District of Thousand Lakes belong, although in fact over 2700 of those lakes are of 1 ha in area each, and numerous lakes taking ca. 7% of the area of that lake district. There are among others 2 biggest lakes in Poland – Śniardwy and Mamry, and also others like: Niegocin, Nidzkie, Roś and Tały. Rivers having their sources in the Mazuria Lake District (Omulew, Rozoga, Szkwa, Pisa, Elk) and Pregola (Łyna with Guber, Angrapa) belong to a river basin of Narva. The Mazuria District is a part of the Polish East Baltic Lake District between the Old Prussian Lowland and the Iława Lake District in the west, the Lithuanian Lake District in the east and the North Mazuria Lowland in the south. The lake district includes rows of terminal moraines of three main phases of Vistula glacial period, what decides about the varied lie of the land, including ranges of moraine hills, depression without ebbs, kames, eskers and in the southern part also saunder fields. In the area of the Mazuria Lake District there are 114 nature reserves. There are over thousand monumental trees, among which there are among others: Royal Oaks in Ruciane and the Oak over Mukre on the lake shore. There are 139 erratic blocks, of 19-metre-perimetres, and fields of those blocks, called "Fuledzki Horn" and "Dobieński Horn" and "Bachmanowo" are protected as reserves. The most valuable natural complexes are the Mazuria Landscape Park, separated as regions of protected landscape, taking the area of ca. 40 000 ha, including ca. 18 000 ha of forest and ca. 15 000 ha of water with Mamry and Śniardwy Lakes. In the region of Mazuria there are many navigational routes mainly for yacht tourism and also for tourist and leisure cruises, among others: Giżycko – Węgorzewo, Giżycko – Mikołajki – Ruciane Nida, Mikołajki – Pisz and Mikołajki – Ryn, and also numerous kayak routes, among others: Krutynia river that is streams joining a few dozen of lakes and Sapina river beginning from the south bank of Kruklin Lake.

The Conference took place in the historical walls of Teutonic Knights in Ryn, being now also exclusive Conference Centre with the elegant Hotel, situated in the beautiful hill between Rynskie and Olów Lakes. It is the second building in Poland of that type, situated in an undulating terrain, among fabulous lakes meandering sometimes in long channels, full of wonderful bays and peninsulas. That medieval stronghold was built in stages and in the past it looked in a completely different way than at present. The oldest information about the Teutonic castle which gave the beginning to the settlement and the later town comes from the chronicles of Wigand from Marburg dated 1377. The first phase of the building is dated for the second decade of the 14<sup>th</sup> century till 1376. The second phase of the building began in 1377 by founding encircling walls, 4.5m thick and becoming narrow to 2.5m, on orthogonal projection of 44m x 52m, with a huge settlement outside castle walls. Two wings: south-eastern and north-eastern were planned then (southern and northern ones were 56.5m long, and eastern and west ones – 44.8m and their internal width equalled 17m). On the other sides that quadrilateral was closed with curtain walls and an untypical square tower situated in the western corner. In 1391 Fryderyk von Wallenrod – Konrad Wallenrod's brother, the Great Master of the Teutonic Order became the first commander in Ryn. Then the conversion of the Castle was made, among others in a basement creating a huge room with a cross-vaulting, on the first floor the Chapel with distinguished windows with the chapel house and a flat of the commander being next to it and the armoury situated above it. The highest storey was surrounded by defensive porches and the communication in the wing was ensured by a storeyed cloister. In the south-eastern side of the Castle there was a settlement inside castle walls, and all was surrounded by a moat watered from Olów Lake. In 1525 after the liquidation of the Teutonic Order in Ryn there was the seat of the office of a starost of the Duchy of Prussia in Ryn and it was converted, and then again in the 17<sup>th</sup> century when the south-western wing with the gate and the north-western wing, and then yet a few times. In the 19<sup>th</sup> century the Castle became a private possession and after the next conversion on 5<sup>th</sup> August 2006 the Hotel was opened in it.

As every time the Conference on Achievements in Mechanical and Materials Engineering AMME'2008 was an occasion to meet over 200 specialists from the mentioned thematic fields from over 35 countries of the World. The best papers prepared by the delegates of that conference were published in scientific journals. Nothing can be replaced by scientific discussions and disputes and visions of new scientific inquiries which as usual took place during meetings of outstanding scientists from the whole World. During the AMME'2008 Conference 20 Plenary Lectures and 25 Sessions Lectures, qualified for the oral presentation were given. Moreover, ca. 250 papers were presented on the Poster Session. Those outworkings are important content-related and significant scientific output of that Conference and significant contribution of the WAMME Academy to the scientific output in the field of materials science and engineering, mechanics, mechanical engineering and manufacturing engineering. According to the established custom the Chairman of the Organisational Committee of the Conference prepared a collective presentation about the subject matter of each poster and the group of its Authors which together with the prepared slide for each paper was presented during the first Plenary Session of the Conference. The Opening Ceremony which took place in the wonderful historical Courtyard of the Castle in Ryn made great impression on the AMME'2008 Conference delegates. The String Quartet "Akademios" together the accompanying musicians presented wonderfully achieved concert of L. van Beethoven and "Four Seasons" by A. Vivaldi including the wonderful interpretation of a summer storm. Luckily the weather was very nice during the Conference. It enabled its delegates the ship cruise along ten Mazurian lakes, including along the biggest one – Śniardwy, from Ryn to Ruciane-Nida in the framework of the social programme.



The Conference AMME'2008 was accompanied as usual by the expected handing of the Great Honorary Award of Academic Owl to Prof. Maria Helena Robert from Campinas, Brazil, the Honorary Award of Professor Fryderyk Staub Golden Owl to Prof. Hong Hocheng from Hsinchu, Taiwan as one of the most active foreign scientists cooperating with the Polish scientific societies and also the Professor Jan Adamczyk Award for outstanding young scientists for the best PhD theses to Dr Piotr Bała from Cracow, Poland.

During the General Assembly of the World Academy of Materials and Manufacturing Engineering WAMME very important decisions were made. It was decided to announce the new edition of the selection of Fellows of the WAMME Academy. Professors of materials engineering, mechanics and manufacturing engineering from the all countries of the World can candidate. Candidates can be recruited mainly out of Chairmen of the Organisational and Programme Committees of important international scientific conferences, editors-in-chief of important international scientific journals, doctors honoris causa, members of national academies of sciences, persons awarded important scientific prizes being of international meaning, leaders of leading internationally-known scientific centres, leaders of important international research programmes and other outstanding representatives of science being of international meaning. The necessary condition is the recommendation of at least three present Fellows of WAMME Academy or at least one Scientific Association and the submission of a bibliographical note and the information about the scientific output with the complete list of publications and also the submission of a full paper not published so far, including own scientific researches or summing up the original achievements of an own scientific school, which after reviews fulfil requirements of JAMME or AMSE Journals and will be qualified for print. Final decisions about the choice as a Fellow of WAMME Academy will be made on the next meeting of the General Assembly of the World Academy of Materials and Manufacturing Engineering WAMME in June 2009.

The AMME'2008 Conference was also accompanied by annual meetings of the Metallic Materials Section of the Materials Science Committee of the Polish Academy of Sciences and also other important accompanying events this year among others: the 14<sup>th</sup> International Scientific Conference on Contemporary Achievements in Mechanics, Manufacturing and Materials Science CAM'S'2008 dedicated to Dr Eugeniusz Hajduczec from the Silesian University of Technology in Gliwice, Poland on the occasion of his 60<sup>th</sup> Birthday, which took place in May 2008. The AMME'2008 Conference was also accompanied by Sessions of Students' Scientific Circles SO-KÓŁ, which took place a dozen days earlier in Gliwice or in touristic centres in Beskidy Mountains not far way from Gliwice, Poland.

All the delegates of the AMME'2008 Conference had nice impressions from the stay in Poland and on hospitable Mazuria and evaluated well scientific debates and new constant relationships of scientific cooperation. I thank the conference delegates for the preparation of papers, mainly full ones, which fulfil high editorial requirements, for the preparation and the presentation of conference lectures and for the preparation of posters for Poster Sessions. I thank all the co-organisers of the Conference for their efforts, and reviewers and other persons participating in the editorial process for their valuable help in the achievement of such a high level of papers which were prepared for print among others in Archives of Materials Science and Engineering. I have the pleasure to inform that the preparation of the organisation of the next General Assembly of the WAMME Academy and the 17<sup>th</sup> International Scientific Conference on Achievements in Mechanical and Materials Engineering, which are planned to be organised in Kazimierz Dolny upon Vistula river near Puławy, as usually in Poland has begun. I invite already today to participate in those important events.

Prof. Leszek A. Dobrzański M. Dr hc  
Editor-in-Chief of the AMSE  
President of the WAMME  
President of the ACMS&SE

Gliwice, in August 2008