

## **Market Watch, issue 142 - February 2012**

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**06 February 2012**

### **IFA between the values of the past and the hopes of the future/**

#### **• 55 years of spirit and scientific prestige open up new perspectives for Romanian Physics**

For the Institute of Atomic Physics (IFA) at Magurele Platform, the year 2011 ended in a festive note marked by two events: a workshop of technical-scientific creativity for high school students and the “IFA 2011” symposium.

I will briefly describe these events that, through their professional and emotional imprint, have significantly contributed to strengthen the (personal) confidence in the huge potential that the Romanian Physics represents due to both its senior researchers and their young followers.

On the 19<sup>th</sup> of December of 2011, IFA ([www.ifa-mg.ro](http://www.ifa-mg.ro)), in collaboration with the Faculty of Physics, The National Institute for Laser, Plasma & Radiation Physics and the “Horia Hulubei” National Institute of Physics and Nuclear Engineering, held a workshop of technical-scientific creativity at which high school students of the VI<sup>th</sup>, X<sup>th</sup> and XI<sup>th</sup> grade from the “Grigore Moisil” National College from Bucharest participated in.



The idea of initiating and organising creativity workshops stems from IFA’s attempt to revive young high school students’ willingness and desire to learn, to know, to understand as more as possible of all that exists, of all that surrounds us, to discover their abilities and stimulate their

creativity. During these short forays in the fascinating universe of Physics, IFA aims to offer young students further knowledge in addition to those acquired in school in this area of study as well as an opportunity to cultivate an open attitude towards what is new. The contribution that the scientific world, the research institutes in particular, can make (it is incumbent on it to do so) to the professional and moral development of the young generation, of those who represent the intellectual future of this country is, in my opinion, obvious.

### **IFA in the light of present achievements**

The “IFA 2011” Symposium held in the 21<sup>st</sup> of December of 2011, marked the 55<sup>th</sup> anniversary since the establishment of the Institute of Atomic Physics (IFA) (six years after the Academy Institute of Physics was set up – the first scientific research institute in the country!), the last three years representing a period of reconstruction and strengthening of IFA’s capacity to contribute to increasing the scientific research potential in Romania. The event was attended by Romanian and foreign personalities of scientific, academic, industrial and governmental communities. The programme of the symposium included a presentation of the institute’s activities and results obtained in the current year, an outlook for the next period, as well as awarding IFA distinctions for the year 2011 – IFA Medal for contributions to the development and promotion of this area of research and IFA Award for remarkable results at International Olympiads in Physics.



As in previous years, the main activity of the institute in 2011 was the management of research programmes that finance Romania’s participation in large international collaborations in the field of Physics such as: EURATOM – Fusion – the European programme in the field of energy-controlled thermonuclear fusion (starting 1999, IFA also ensures the management of the Research Unit of the EURATOM-MEdC Association); “Fusion for Energy” (F4E) – the programme of the European Union at which 6 states participate in constructing the ITER experimental thermonuclear reactor at Cadarache, France (IFA activity started in 2011); CERN - The European Organization for Nuclear Research at Geneva, Switzerland, whose LHC particle

accelerator is expected to provide answers to fundamental questions concerning matter and the formation of the Universe (IFA activity started in 2011); the cooperation with the French Atomic Energy and Alternative Energies Commission (CEA) from France, under the bilateral agreement signed in 2009.

In addition to the aforementioned management activities of European research programmes, IFA also coordinated and participated in the project “Evaluation of Romanian potential in physics research and development of the national strategy of international cooperation” (ESFRO/2009-2011, [www.ifa-mg/esfro](http://www.ifa-mg/esfro)) along with other 16 research and educational institutions from all over the country. The results of the ESFRO project, the reports and the data base that was set up represent highly important landmarks for a harmonious development of this field of research, that, we hope, will also be a part of the next national research strategy.

### **Awards conferred upon personalities and young hopes alike**

IFA awards, an idea shaped up ever since 2008 and put in practice in the following year, were founded as a token of homage to past values as well as one of appreciation for present ones.

IFA awards and medals of honour were conferred upon young winners (and rewinners) of International Olympiads in Physics and Astrophysics that took place in 2011. These were, at least for myself, the most impressive moments of the event, with a strong emotional impact. Our winners, some of them already studying at prestigious universities abroad, confessed that they came to IFA with great joy due to the appreciation they feel it is given to them here. I interpreted this message, and I convey it to the entire Romanian research, as a great duty we have towards these exceptional young people: giving them the opportunity to accomplish something “back home”.



Also, thank you letters were handed to the coordinators who provided the professional and psychological training of the Physics Olympic teams, for special merits in building and promoting a culture of performance in physics, by training and educating the new generations of professionals in this field.

The “IFA 2011” symposium ended with the award of IFA medals and diplomas of honour to some of the personalities of Romanian science, especially in the field of physics, in appreciation of their research activity and results, many of which related to IFA.

By creating an elite scientific community and a renowned school for Romanian science, IFA represents the cradle of Romanian physics. IFA’s scientific legacy, that is ours, that belongs to all of us, is due to a past whose foundation was hard work, dignity and dedication. These fundamental values are reflected and continue to be reflected in the consciousness of many, be they young or elders. I continue to believe, wholeheartedly, that together we can create a New IFA that will carry on the prestige of this institute, emblematic of the Romanian Physics.