## REPORTS

## Mexican Olympiad in Informatics

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The Mexican Olympiad in Informatics (OMI) is a National Competition that every year the "Comite Mexicano de Informatica A.C. (COMI)" does in order to select the best young programmers in Mexico below 19 years old.

Mexico (whose official name is "United States of Mexico") is a country composed of 32 states, with 112 Million Inhabitants and close to 2 Million square Kilometers in territory. We have been doing the OMI every year since 1996, the method that we use is as follow:

- 1. National Invitation to participate.
- 2. Exams via Internet.
- 3. 32 State Olympiads, one in each State.
- 4. Each State sends the best 4 to the National Olympiad OMI.
- 5. From the OMI we select the best 32.
- 6. The 32 Pre-Selected are in training over one year, via Internet and 4 training camps of 10 days each; from them we get the 4 Contestants that represent Mexico at the IOI.

This process is repeated every year and we have to quote that:

During 2010 we registered 16,521 students from all over the country and during the first exams via Internet we reduce the amount to 2081 students, then we sent the best 60 of each State to the delegate in that State. They bring all the students to some place in that State, train them and do the State or Regional Olympiad in order to get their four best Students in order to represent the State in the OMI.

We ask the competitors to be 19 years old or below and that they have at least one more year to finish their High School, this is in order to comply with the IOI requests after the one year they will be in training after they get in the Pre-Selected team.

Concept	Quantity	Percentage
States participating	28	87%
States not participating	4	13%
Students that could compete	8,500,000	
Registered competitors	16,521	0.19%
Contestants at the OMI-2010	106	100%
Women contestants	20	19%
Men contestants	86	81%
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Gold medals	9	17%
Silver medals	18	33%
Bronce medals	27	50%
All medals	54	100%
Women medalists	5	9%
Men medalists	49	91%
Government school medalists	38	70%
Private school medalists	16	30%
Government school contestants	84	79%
Private school contestants	22	21%
High school contestant medals	53	98%
Secondary school medals	1	2%
Primary school contestant medals	0	0%
Average contestant per state	3.78	
Perfect score per contestant	800	100%
First place score	676	84.5%
Average points per medalist	468	58%
Average points per contestant	260	33%
Zero points contestants	4	4%
40 perfect score per state 800×4	3200	100%
Best state score	2303	72%
Minimum score per state	10	1.25%
Average age of contestants	16.6	years

Table 1 General statistics OMI 2010 Mérida, Yucatán

## A. Cepeda, M. Garcia

The 32 students Pre-Selected in 2010 are still in training and we will have our National Selection Team in order to compete in Thailand IOI 2011, at the end of May this year.

In this report we present the results obtained during the OMI 2010, celebrated in September of that year in the City of Merida, State of Yucatan; the same place in which we had the IOI 2006. We also include some statistical data, which will help to understand the process we carry on in the OMI each year.



**A. Cepeda** has a communications and electronics engineer degree (1967) from the Escuela Superior de Ingenieria Mecanica y Electrica ESIME, National Politechnic Institute in México City. He also has a bachelor degree in physics and mathematics (1969) from the same institution and a MSc in solid state physics (1971). He is the president of the Mexican Olympic Committee in Charge of Organizing the

Mexican Olympiad in Informatics every year. He is also the president of the International Olympiad in Informatics IOI (2008–2011). He is the planning director of Auronix SA de CV, group of companies developing software for automatic processes and telecommunications in Mexico.



**M. Garcia** has a communications and electronics engineer degree (1971) from the Escuela Superior de Ingenieria Mecanica y Electrica ESIME, National Politechnic Institute in México City. She is in charge of the general secretary at the Mexican Olympic Committee. She is also the administrative director of Auronix SA de CV, group of companies developing software for automatic processes and telecommunications in Mexico.