

SOUTH AFRICA WINS THREE MEDALS AT MATHS OLYMPIAD

The South African team of six high school students has won three Bronze Medals at the International Mathematical Olympiad, held in Japan earlier this month.

The team members were

Dirk Basson (grade 11, HS Diamantveld, Kimberley)
Gerhard du Toit (grade 11, Paarl Boys High School)
Yao-hung Ou (grade 12, Christian Brothers' College, Bloemfontein)
Jon Smit (grade 11, Grey College, Bloemfontein)
Ingrid von Glehn (grade 11, St Stithian's Girls' College)
Tamara von Glehn (grade 11, St Stithian's Girls' College)

The Team Leader was Professor Nic Heideman (Rhodes University), and the Deputy Leader was David Hatton (University of Cape Town).

The team was selected after a nationwide Mathematical Talent Search, conducted by the South African Mathematical Society and sponsored by the Old Mutual. The Talent Search began in January 2002, and the team was selected after a week-long Camp held in April at the University of Cape Town.

The team continued training by correspondence, and met at the University of Pretoria for a week of training before leaving for Japan.

The contest was held in the National Olympics Memorial Youth Centre in Tokyo. A total of 455 contestants from 82 countries took part, of whom only 30 were girls. (The South African team could boast two girls, and no other team had more than two.)

They wrote two 4 1/2 hour problem papers on two successive days. Each paper contained just three problems. Although the problems can be solved using only high school mathematics, they are of sufficient difficulty to tax the powers of even experienced professors of mathematics.

All participating countries were invited to submit original problems for use in the IMO. The problems were checked by a team of international experts, and a short list of 27 was presented to the IMO Jury (which consists of all Team Leaders). It is considered a point of honour for a country to have one of its problems selected.

For the first time, two problems from South Africa appeared on the short list. Both were classified as difficult. Though neither made it into the final six, they were high on the list of the Jury's favourites. Congratulations to their originator, Dirk Laurie.

While the papers were being marked, the contestants enjoyed a programme of sightseeing in Tokyo, which included a day at Tokyo Disneyland.

Dirk Basson, and twin sisters Ingrid and Tamara von Glehn, won Bronze Medals, which were presented at a Medal Ceremony attended by the Crown Prince of Japan. Dirk, Ingrid and Tamara all represented South Africa at the IMO in Glasgow, Scotland, in 2002.

The top positions in the unofficial international ranking were taken (in order) by Bulgaria, China, the United States, Vietnam, Russia, Korea, Romania, Turkey and Japan, with the United Kingdom and Hungary tied in tenth place.

The South African team was ranked 45th out of 82 countries. The only other African country taking part was Morocco, ranked 55. Next year, Mozambique will take a team to the IMO. Cooperation between Mozambique and South Africa in team training has already

begun. It is hoped to increase African participation in the IMO.

On their last day in Tokyo, the South African team were entertained to lunch by the South African Ambassador to Japan, Dr Krish Mackerdhuj.

The team was accompanied by Professor John Webb (University of Cape Town) who is Secretary of the Advisory Board of the IMO. During this year's IMO, he was nominated for a second four- year term as Secretary.

Next year the International Mathematical Olympiad will take place in Greece, and will take place in Athens just before the Olympic Games.

Professor J H Webb
Department of Mathematics and Applied Mathematics
University of Cape Town
7701 RONDEBOSCH
SOUTH AFRICA
Tel: +27 21 650 3193 (office)
Fax: +27 21 686 0476
Email: jhwebb@maths.uct.ac.za