



PHOTO: ORCHID CHAKMA

BRINGING HOME THE GOLD

The phenomenal victory of the Bangladesh Math Olympiad team at IMO 2018

MOHUA MOULI

After a historic victory at this year's International Math Olympiad (IMO) in Cluj-Napoca, Romania, the six-member Team Bangladesh sat with SHOUT to share their experience and understanding of one of the biggest and most prestigious competitions in the world.

This was the 59th IMO and Bangladesh's 14th participation – the first time our team brought home a Gold medal through the hands of Ahmed Zawad Chowdhury, a Class 12 student from Cantonment English School & College in Chittagong. Team members Joydip Saha, Tamzid Morshed Rubab and Thanic Nur Samin, all studying in Notre Dame College, took home three Bronze medals while Rahul Saha of Dhaka College and Showmitra Das of Faridpur Police Line High School received Honourable Mentions in the competition.

Team Bangladesh ranked 41st in the two-day long competition, taking their overall tally of medals to one Gold medal, 6 Silver medals and 22 Bronze medals and 27 Honourable Mentions.

How has your journey been up until this year's IMO?

Tamzid Morshed Rubab: I've always been interested in math. After taking part in the junior category, I went to the junior camp, where I learned how to do more advanced problem solving. After that I took part in the secondary category back in Class 10. During this period I got through to the national round and later attended the national camp and eventually got selected for the extension camp. From here I was selected to represent Bangladesh in the IMO this year.

Ahmed Zawad Chowdhury: After our PSC exams, when my school math teacher introduced me to the Bangladesh Mathematical Olympiad (BdMO), I knew I'd found something I could love. During my first participation in the primary category back in 2012, I was awarded the "Champion of Champions". Since then, I have been participating in the BdMO every year.

Rahul Saha: I used to see my older brother participate in BdMO every year when I was little. That's how I ended up participating in Class 5. After that I took part in the BdMO and finally got my first prize in the junior category in Class 8. From there I eventually got picked to be a part of Team Bangladesh for this year's IMO.

Thanic Nur Samin: We had a math club in school. After I joined that club I became interested in participating in the BdMO. I first participated in Class 7 in the junior category. After that in Class 8 I achieved third place in the national



Ahmed Zawad Chowdhury, winner of Bangladesh's first-ever Gold Medal at the International Mathematical Olympiad.

round. I got my first prize in the junior category in Class 8 and from then on I've won a prize in the national category each year.

Showmitra Das: I wasn't always interested in math but I got into it from around Class 8 after which I felt like I could put in some serious effort and started taking part in the BdMO.

How has your overall experience been in this year's IMO?

Thanic: I made a lot of friends at the competition. There were people from Belarus, Argentina, and Belgium whom I interacted with during the Olympiad.

Showmitra: This was the first time I went to the IMO and I felt a lot of pressure to do well. But I did my best to curb my fears and enjoy it as much as I could.

Walk us through the process of getting through BdMO and the IMO.

Rubab: It starts from the regional round with thousands of participants. There is a 1 hour 15 minute long exam with 8 to 10 questions. These problems are all solution-based and cover four topics: Algebra, Geometry, Number Theory, and Combinatorics. Once we got through the regionals, we went into the national round where the problems were all proof-based. From there around 40-50 participants are selected to take part in the national camp, and then 20-25

students are picked for the extension camp. And finally the Team Bangladesh is formed.

Zawad: The IMO spans over two days. Each day there is a 4.5 hours long exam with 3 math problems, carrying 7 points each. The problems are all proof-based and they become progressively difficult. They're based on the four topics Rubab mentioned. This year 597 participants from 107 countries took part in the IMO.

Rahul: In IMO the medals are given maintaining a ration Gold to Silver to Bronze ratio of 1:2:3. Honourable Mentions are given to those who have fully answered at least one of the 6 problems.

How did you prepare for each of these stages?

Rubab: We studied from various books on each topic. The camps helped us train under a proper schedule and that helped increase our speed. We studied from books like *101 Problems in Algebra*, *Introduction to Algebra: Art of Problem Solving*, *Introduction to Counting & Probability: Art of Problem Solving*, *104 Number Theory Problems* and so on.

In IMO, which teams would you say are Team Bangladesh's biggest competitors?

Rahul: We've always had a rivalry with our neighbouring Team India, although we have a lot of great friends there.

Zawad: It is generally Asian countries like China or Korea, and other countries like the United States. I think for the most part, we still fall behind the countries that top each year because their culture promotes skill-building in mathematical problem solving.

Other than doing math, what hobbies do each of you have?

Rahul: I enjoy dabbling with the Rubik's Cube and doing magic tricks to tackle anxiety issues.

Zawad: I read books, write, debate, and also try to learn as much as I can on any subject.

Rubab: I am interested in programming and I want to study CSE or Math in the future.

Showmitra: I like watching animated films and sometimes read books.

Thanic: I like watching anime and just being an average HSC student.

What advice do you have for future Math Olympians?

Zawad: It's important to pursue what you really like and to not get disheartened when things get difficult, because if it's difficult then it's interesting.

Thanic: Always try to step out of your comfort zone and great things should happen.