Chitra Natarajan: A scientist and an educationist (1954 – 2015)

Chitra Natarajan was the Dean of Homi Bhabha Centre for Science Education, the host institute of IPhO 2015. A theoretical and experimental physicist by training, she was an educationist at heart. She was intrigued with Physics and Maths and did her PhD on Extended Energy Loss and Fine Structure Investigations. Surface sciences particularly interested her and she contributed to the field in India and abroad. Most of her research had important industrial applications, some of which also laid the foundation for development of commercially useful analytical devices in the mid 1970s.



In 1993, she moved from natural sciences to science education. She spent the next two decades of her life working in areas like science-technology-society issues in curriculum, design and technology education, multidisciplinary models of teaching and learning, project-based learning and environment education. She loved nature and had a profound understanding of ecology and sustainability. Her positivity, cheerfulness and innovativeness were infectious. The HBCSE fraternity is and will always be inspired by Chitra's energy, enthusiasm and the commitment she brought to her work. The newsletter team would like to dedicate this last issue of *Reflections* to her memory.

From the editorial team!

Since this is the last issue of Reflections, we would like to show our appreciation to all the people who have helped us directly or indirectly in bringing out the issues of the daily newsletter. Firstly, we would like to acknowledge Anwesh Mazumdar (Convener of 1PhO 2015), the International IPhO community and Jayashree Ramadas, Centre Director, HBCSE for their support.

Special thanks are due to Susneha Ayare who volunteered for the newsletter team at short notice. We are grateful to the following HBCSE members for coordinating with us at different junctures-Sumana Amin, Abha Vaishampayan, Swapna Narvekar, Savita Ladage, Aniket Sule, Vikrant Ghanekar, Pritesh Ranadive, Aakansha Sawant, Shirish Pathare, Praveen Pathak, Nitish Kothekar, Priyanka Sawant, Swapnaja Patil, Shubhangi Bhide, Dinesh D. Pednekar and Umesh V. Shenoy.

We thank Prashant Shinde, Ruturaj Prabhulkar, Vivek Singh, Akshay Pol, Mahesh Pagare and Ramesh Mandavkar of Print Vision Printers who managed to print the newsletter in a short time during the midnight hours. Thanks are also due to the HBCSE Security and drivers Shailesh, Mukesh, Kasinath and Raju Yadav for facilitating our transport. We are grateful to all the enthusiastic student guides, leader guides and bus coordinators who were our informal correspondents. We would like to acknowledge Deepak Davda and Jayendra Talekar, the official photographers of IPhO 2015 who provided us the 'Glimpses' of IPhO.

Lastly, a big thanks to all the students, leaders, observers and visitors. We were overwhelmed by your enthusiastic responses regarding your experiences in India. We hope you enjoyed the company of IPhO newsletter Reflections, just as much as we loved your company in India.

Long hours at the computer and in the field, sleep deprivation, printing glitches and shaky internet connections may have led to some errors in the newsletter issues. For this, we sincerely apologise. Thanks to all those who took the effort to give us constructive feedback.

We hope you have a safe journey back home!

Editorial Team: Sugra Chunawala, Devashree Prabhu, Disha Gupta, Pooja Sharma, Manoj Nair and Adithi Muralidhar

"Winning the prize wasn't half as exciting as doing the work itself"

Maria Goeppert Mayer

Reflections Issues 1 to 9 will also be available online at http://www.ipho2015.in/reflections/ in a couple of days.





Congratulations to all students of IPhO 2015!

Best overall performance & Best performance in theoretical task: Taehyoung Kim (Republic of Korea)

Best performance in experimental task: Sol Kim (Republic of Korea)

Best performance among female participants: Dinh Thi Huong Thao (Vietnam)

eep up the hard work and wish you all the best for your future. We know that your participation in IPhO 2015 was more than just about winning medals. It was a learning experience and an event of a lifetime. It was a celebration of the love for physics and an opportunity to build relations across nations. We were honoured to host you and hope you will remain in touch and come again!

The 47th International Physics Olympiad will take place in Zurich (July 2016). We wish the hosts of IPhO 2016, Switzerland and Liechtenstein all the very best.

Final Reflections

The 46th International Physics Olympiad is drawing to a close. Over the past one week, 382 students from 83 countries across the globe have participated in this celebration of the best in high school physics. Their leaders have spent many hours doing their part of the duty.



Anwesh Mazumdar Convener, IPhO 2015

When we started IPhO 2015 a week ago, as organisers, we were expecting a storm of activities to begin. That storm has now almost passed over us and we feel relieved and happy, of course, that we have accomplished what we set out to do, if not wholly, at least in a good measure. On the way, as a bonus, we had the pleasure of interacting with so many guests from far away lands. On behalf of the organisers, I apologise for any inconvenience that may have been caused to any participant during the event. I thank the entire academic and organisational teams for their massive effort over many months to make IPhO 2015 a success.

When we began our preparations for IPhO 2015 nearly eighteen months ago, we embarked on a unique journey that one takes on perhaps only once in a lifetime. Approaching the end of that journey, I can only look back and say, it was worth every minute of it. "So long and thanks for all the fish!"





GOLD

Taehyoung Kim, Republic of Korea Jingyu Zhao, People's Republic of China Deng Pan, People's Republic of China Sol Kim, Republic of Korea Chua Yee Shuen Darren, Republic of Singapore Chenxing Zhang, People's Republic of China Chung-Yao Cheng, Chinese Taipei Aleksei Krasnikov, Russia Hyunsoo Ha, Republic of Korea Joonhwi Kim, Republic of Korea Adam Robert Busis, United States of America Xinyu Wang, People's Republic of China Akihiro Watanabe, Japan Vu Thanh Trung Nam, Vietnam Zachary Bogorad, United States of America Yu-Chia Lin, Chinese Taipei Mohammadhossein Darestanifarahani, Islamic Republic of Iran Dan Stefan Eniceicu, Romania Lingbang Zhu, People's Republic of China Yi-Lin Tsao, Chinese Taipei Pei-Kai Tsai, Chinese Taipei Yat Wong, Hong Kong Phum Siriviboon, Thailand

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Shun Leung Frankie Lam, Hong Kong
Daulet Kurmantayev, Republic of Kazakhstan
Tudor Costel Cretu, Romania

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Taavet Kalda, Estonia Kirill Voronin, Russia

Kevin Q Li, United States of America

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Botond Oreg, Hungary
Ivan Uteshev, Russia
Chih-Hsiang Yang, Chinese Taipei
Yuk Wong, Hong Kong
Garett Tok Em Liang, Republic of Singapore
Peter Yuen Ho Hin, Republic of Singapore
Joel Tan Shi Quan, Republic of Singapore
Gowtham Amirthya Neppoleon, India
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Qingyue Wu, Canada
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