

5th INTERNATIONAL CONFERENCE OF AIMER

{INDORE, 2019}

Annual Report of 2019

4th Conference Report:

The 4th International conference of **AIMER (Association for International Mathematics Education and Research)** was conducted in Hotel Fidalgo in Panaji, Goa from 4th – 7th Jan, 2019. On 4th of January during the inaugural of the Conference we had the gracious presence of the Executive Chairman of AIMER Mr. Ch. Vijay Prakash. He appreciated the work of AIMER and appealed to the Educators for creating more opportunities for the students to get correct education.

During the Presidential Address Dr. S. R. Santhanam, the President of AIMER, delivered a lecture on the Beauty of the number 432 and its connection with different things in the World and the Universe.

AIMER felicitated two teachers by giving the “Distinguished Teacher Award”. The recipients were retired Prof. Dilip Gotkhindikar from Nashik and Mr. Surya Kumar from Chennai. In this connection we would like to mention that during the Annual Conference, AIMER is giving this “Distinguished Teacher Award” to some extraordinary personalities in the field of Mathematics Education. The recipients of first three years were Mr. Mahadevan from Chennai, Mr. Raghunath Mahapatra from Odissa, Dr. Sivaraman from Chennai, Mr. Viswanath from Bengaluru, Dr. C. K. Mohapatra from Odisha, Dr. S.A. Katre and Mr. Kiran Barve from Bhaskaracharya Prathistana Pune and Mr. A. K Pati from Odisha.

During the 4th Conference a resourceful book on Combinatorics was released, written by Dr. Muralidharan from Chennai. The book is very much useful for the students preparing for Mathematical Olympiads as well as other Competitive exams.

Some of the special lectures are as follows:

A Narrative of how a student-teacher had shaped the professional identity of an experienced mathematics teacher is given by **Dr. Clyde Felix from South Africa.**

The role of Statistics in Business Studies by **Dr. Vidyadhar Mandrekar from Michigan State University – USA.**

An account of the contributions of Sir Issac Newton to Mathematical Physics by **Dr. V Baskaran, retired Scientist from Melbourne, Australia.**

Combinatorics for Mathematical Olympiads by **Dr. S. Muralidharan from Chennai.**

Workshops:

Mrs. Praneetha Singh from Hills Grammer School, Sydney, Australia conducted workshop on Maths Assessments. A 20 minutes interactive session demonstrated how to maximise learning through the assessment process.

Another workshop was conducted by Mr. P Surya Kumar on “A Visual approach to learning Mathematics”.

Various paper presentations of teachers as well as students, debate were a part too.

Overall it was a grand success. All the delegates attended the conference with much enthusiasm and interest.

ACTIVITIES OF AIMER

* To begin with the activities of AIMER, we organised the following:

1) Workshop in Madurai:

AIMER conducted workshop on Geogebra for students of CEOA Matric Higher Secondary School, Madurai from 2nd to 4th February 2019. The Resource persons were Dr. S. R. Santhanam and Mr. Lakshmanamurthy.

2) Fifth Junior Mathematician Course:

Like every year AIMER conducted Junior Mathematician Course – a four-day program from 11th May to 14th May, 2019 in the premises of Sri Prakash Synergy School – Peddapuram. The course focused on “**Non routine problem-solving techniques**” on Algebra, Number Theory, Geometry, Arithmetic, Combinatorics and Coordinate Geometry which caters to Olympiad examinations. Around 30 students attended the course enthusiastically. Four resource persons from the different corners of the country shared their knowledge in all the above-mentioned areas in lucid and succinct style.

3) Student Workshop in Bhubaneshwar:

AIMER conducted a workshop on Olympiad Mathematics for students of grade VIII to X from 2nd to 6th October 2019. The Resource persons were Dr. S. R. Santhanam and Mr. Lakshmi Narayanan.

4) Workshop by Dr. Shyam Sundar Agrawal:

Dr. Shyam Sundar Agrawal from Siliguri, West Bengal conducted workshop on Olympiad Mathematics for the students of Sri Prakash Synergy School, Peddapuram, AP on 18th October 2019.

5) Workshop by Vinay Nair:

AIMER collaborated with “**School of Vedic Maths**”. The founder Mr. Vinay Nair conducted workshop on Vedic Mathematics for the students and Teachers of three branches of Sri Prakash Educational Institutions, AP on 21st and 22nd October 2019.

6) Workshop by Mr. Sundara Murthy:

AIMER collaborated with “**AMTI**”. Mr. Sundara Murthy, Treasurer of AMTI, conducted a workshop on Mental Mathematics for the students of Sri Prakash Synergy School, Peddapuram, AP on 28th and 29th November 2019.

7) Workshop by Mr. Siva Sankara Sastry:

Mr. Siva Sankara Sastry of Kolar, Karnataka conducted a workshop on Origami in Mathematics for the students and teachers of Sri Prakash Synergy School, Peddapuram, AP on 6th and 7th December 2019.

8) Workshops by Dr. Damjan Kobal and Mr. Crabtree:

Dr. Damjan Kobal from Slovenia and Mr. Crabtree from Australia conducted workshops for 200 students of different branches of Sri Prakash Educational Institutions on 16th December 2019 in Rajahmundry and 17th December in Peddapuram, AP.

9) Workshop by Prof. Miriam Amit:

Prof. Miriam Amit conducted workshop on Problem Solving Techniques for the students of Sri Prakash Synergy School, Peddapuram, AP on 17th December 2019.

10) AIMER initiated Mathematical Olympiad Test (AIMER-MOT):

Around 1000 students from different schools of Andhra Pradesh and other states of India wrote the exam. It has 2 levels. Students who qualified first level they wrote second level exam. The winners of second level exam will be announced in January 2020.

* **Our Academic Council: (International Members)**

1) Mrs. Praneetha Singh (Australia)

She has completed her Post Graduation certificate in Mathematics from Queensland University of Technology, Australia in the year of 2005: she completed her Masters in Educational Leadership from the University of New South Wales, Australia in the year of 2012. Praneetha Singh has been teaching secondary education for over **30 years** initially in maths and science and later focused on pure mathematics. She is an active member of the Australian Education Industry as she is a member of AIS, MANSW and the Teachers Association of Australia. She has conducted workshops on mentoring and coaching and Methods of Effective teaching and learning Mathematics.

2) Dr. Mark Prendergast:

He is from Ireland. He completed his PhD in Mathematics Education. He is working as assistant professor in dept. of Mathematics Education in Trinity College Dublin. He graduated with 1st class honours. He was Awarded 'Advanced Scholars Programme Scholarship' upon graduation in 2007 - this is an award presented on the basis of outstanding academic achievement in undergraduate studies. He was nominated for DIT College Teaching Award in the academic year of 2012-13.

3) Dr. Clyde Felix:

He is a senior lecturer in Nelson Mandela Metropolitan University of South Africa. He worked as a teacher at high school level as well as lecturer at the University. Presently he is the Head of the Department of Mathematics Education in Metropolitan University.

4) Dr. Paraic Treacy:

He is from Ireland. He completed his PhD in Mathematics Education. He is a lecturer in the dept. of Mathematics Education in the University of Derby, UK..

5) Dr. Miriam Amit

Professor Miriam Amit is currently the Dean at Ben-Gurion University at Eilat, after being the Director of the Center and the Head of the Department for Science and Technology Education at Ben-Gurion University of the Negev.

Professor Amit has an international reputation and is affiliated with prestigious institutions in the United States, Australia, Sweden and India, which promotes Mathematics and Science education (STEM) to vast population. Professor Amit's research has been published in highly acclaimed journals and she has written books on math and science learning and teaching. She is the recipient of numerous awards, including the Guastella award for the advancement and empowerment of math and science education, the British Council Award for Leaders in Mathematics Education, and the IOWME award (the International Organization for Women in Mathematics Education) for research on Gender in Mathematics.

6) Mr. Andrew Wrigley:

He is from Scotland. He is working as Senior Teacher of Mathematics in Queensland College of teachers in Australia. He has taught Chemistry and Mathematics at high school level in England, Bermuda and Australia for the past 35 years.

7) Dr. Marilena Aura Din:

Dr. Din is from Romania working as associate professor in The Romanian – American University of Bucharest. She was an assistant senior researcher in Academy of Educational Development, Washington DC.

8) Dr. Natalya Vinogradova:

He is a PhD in Mathematics Education; Dr..Natalya is working as an associate professor of Mathematics in Plymouth state University – USA.

9) Dr. Jeffry Wanko:

He is a PhD in Curriculum, Instruction and Educational policy. He is working as a prof of Teacher Education in Miami University. His write-ups are published in several journals. He gave lectures on Teacher education in different countries. He conducted a workshop in our 3rd International Conference.

10) Dr. Damjan Kobal:

He is a Faculty of Mathematics and Physics in the University of Ljubljana, Slovenia. He is the head of National Faculty of Mathematics and Physics Seminar for teachers. He obtained his PhD at the University of Notre Dame, USA in 1995. He has lectured at several meetings for teachers in Slovenia and abroad. As National representative he participated twice at the PCMI Institute for Advanced Study International Seminar in

Park City, USA. As a leading expert in Geogebra he was a plenary speaker at the first International Geogebra Conference in Hagenberg, Austria in 2009, and remained active in Geogebra use and promotion ever since. He has also been actively participating at the last four ICME Conferences. He has been involved in a number of International Educational Projects. His research concerns Mathematics Education and Algebra, while his main area of work is Mathematics Teacher Education and promotion of Mathematics.

Our Academic Council: (National Members)

1) **Dr. C.K Mohapatra**

He is a retired professor of Mathematics from Sambalpur University. He wrote several books on Olympiad mathematics. He conducted many workshops for teachers and students.

2) **Dr. K. Shanti**

She is a doctorate in the field of Mathematics and Computer science. After working as a full-time professor of mathematics in two reputed colleges in Chennai, and headed as a Principal of a reputed school in Chennai.

3) **Dr. Sudhakar C. Agarkar**

He is a doctorate of Science and Mathematics education. He worked and retired as a professor from the premier institute of India, i.e., Homi Bhabha Centre for Science and Education, Mumbai.

4) **Dr. Lidson Raj**

He is a doctorate in the field of Mathematics Education. He worked with SCERT Kerala and worked on the project NUMAT (in Kerala)

Future plans:

- 1) To conduct workshops to students as well as the teachers of mathematics all over India and abroad.
- 2) To impart and share knowledge in Mathematics to the student and teacher community, it is proposed to collaborate with similar associations.
- 3) AIMER guides students and teachers for doing their research in the field of Mathematics Education and present their papers in International Conferences.

In this regard AIMER feels happy to share that under the guidance of our president Dr. S. R. Santhanam several students and teachers presented their papers in the International Conferences.

In 2017 two students Master Vamsi & Master Abhiram and Mr. MVVS Murthy, the Senior Principal of Sri Prakash presented their papers in Hungary Conference.

In 2018 Master Praneeth Sai, a student of grade 11 presented his paper in the GRDS (Global Research and Development Services) Conference, Sri Lanka.

In 2019 one student Miss Maitry Bairy and 5 teachers Mr. Bhas Bhamre, Dr. Muralidhar Bairy, Mrs. Shailaja Bairy, Mr. Raja Climax and Mr. Sai Kumar presented their papers in an International Conference organised by BE-MTS in Phillipines. Master Rahul Dev Sharma a student of grade 12 presented a paper in the 8th International Conference conducted by South-East Asian Ministers of Education Organisation.

Presently Dr. Santhanam is guiding a student of grade 11, Master Chandan Dev Sharma to present a paper in ASIA PACIFIC Conference on Education, Teaching and Technology to be held in Singapore during 19th-20th June 2020.

AIMER proposes to guide students as well as teachers for conferences to be conducted in Europe or any other part of the World. Interested students and teachers can approach the President regarding this.

THANK YOU