IAVM

3rd International Vedic Mathematics Conference

Conference Report

RV College of Engineering
Bengalaru

23rd - 25th August 2018

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Report on the 3rd International Vedic Mathematics Conference organised by The Institute for the Advancement of Vedic Mathematics (IAVM)

The 3rd International conference was held at the RV College of Engineering in Bengaluru from August 23-25, 2018. R.V. College of Engineering (RVCE) was established in 1963 and is one of the earliest self-financing engineering colleges in India. The institution is run by the Rashtreeya Sikshana Samithi Trust (RSST), a non-profit trust. The RVCE is today recognized as one of India's leading technical institutions.

The delegates and speakers came from various countries like the UK, USA, South Africa, Dubai and the Philippines, as well as from diverse parts of India, such as Pune, Delhi, Chennai, Nagpur and Hyderabad. The conference spanned 3 days, where Day 1 and Day 2 were dedicated to the presentation of research papers, and student and teacher workshops were conducted on the third day.

At the inaugural session, attended by some 300 people, speeches were given by Sri Syed Shahameer – Registrar of the RV Educational Institutions, Dr K.N. Subramanya - Principal of RVCE as well as Swati Dave – Trustee and co-founder of the IAVM. The keynote speech was done by James Glover – Chair of the IAVM. Swati Dave spoke about the IAVM, its activities and rapid expansion and development. In his keynote speech, James Glover spoke about the gift that India has given to the world. He described the expansion of the English language, which is taught in about 60% of schools in foreign countries around the world, and yet the decimal system of numbers from India is learnt in 100% of schools across the world. All children learn these numbers, and it is a great gift from India. James went on to declare that Vedic Mathematics might well be the next great gift from India - it has already taken root in various provinces in the Philippines.

The papers presented on Day 1 and Day 2 were of high quality. Topics ranged from new insights into Vedic Maths, the History of Indian Mathematics, Applications of Vedic Algorithms to Digital Technology and the Impact of Vedic Maths in Education in India. Highlights were papers on Reverse Osculation by Geeta Ghormade, the Chhanda Shastra of Pingala by Shaifali Joshi, Kolam patterns by Gowri Ramachandran, Binary Arithmetic by Muthuselvie Prabhu, Applications of Graph Theory to Ancient Shlokas by R. Prakash et al., Prime Number Investigations by Peter Greenwood and Marianne Fletcher, Modular Arithmetic by Ushar Sundar, as well as Indeterminate Linear Equations by Ashwini Kale. All these papers and more demonstrated new research into applications of the Vedic Maths sutras.

The complete proceedings will be available by the end of this year.

The third day was entirely taken up with workshops in five streams for high school teachers, primary school teachers, primary students, secondary students and college students. There were about 300 students and 60+ teachers. Most of the workshops were introductory. Of particular note were the sessions run by Dr Vasanth Shastri for college students on how to use Vedic maths to gain advantages in sitting public examinations. Our thanks go to Gowri Ramachandran, Marianne Fletcher, Geeta Ghormade and Kuldeep Singh for running the other workshops. All who attended showed great interest and enthusiasm for the Vedic methods.

Many delegates expressed their sincere wish to have the next international conference at the same venue next year with extended workshops and without parallel sessions for papers.

The IAVM is indebted to the staff at RVCE for their generosity and hard work in managing all the logistics. In particular we would like to thank Raghavendra S.G. Prasad, Dr K. Sridevi, Head of Mathematics, and the faculty of the Maths Department for organising and enabling the smooth running of the conference.

Papers:

	Topic	Author
1	Myths and Facts about the Inventions by Ancient Scholars in the Vedic Mathematics Arena	Dr G.S.Babu, P.C.Reddy
2	A Deeper Look into Tirthji's Methods for Generating Recurring Decimal Strings	Marianne Fletcher
3	Sharing Experiences of Research Innovatons on Vedic Mathematics in the State of Kerala	Dr Smitha
4	Reverse Osculation Process for Even Divisors	Geeta Ghormade, Anant Vyawahare
5	Chhanda Shastra of Pingalacharya	Shaifali Joshi, Anant Vyawahare
6	Totally Self-Reliant Trigonometry	Nathan Annenberg
7	Kolam: Dots and Doodles to Mathematics	Gowri Ramachandran
8	Application of Vedic Sutras in Binary Arithmetic and Binary Logic	Muthuselvie Prabhu
9	Study of Applications of Graph Theory in ancient Indian shlokas (scripts)	Prakash R, Aashish M, Raghavendra Prasad, Srinivasan G.N.
10	The Origin of Calculus	Geeta Ghormade
11	Applying the Ekadhikena Purvena Sutra to Investigate Prime and Fermat Pseudoprime Numbers using a Multiple-precision Arithmetic Library in C/C++	Peter Greenwood

12	The Ekadhikena Purvena sutra: generating patterns, symmetries and asymmetries in binary and decimal strings	Peter Greenwood, Marianne Fletcher
13	Finding Sums of Powers of Roots of Polynomials	Kenneth Williams
14	Design and Implementation of High Efficiency Vedic Binary Multiplier Circuit Based on Squaring Circuits	Chandu Y, Karthik Neregal, Pratham Hebbar
15	Designing of Digital Circuits using Vedic Mathematics for Engineering Applications	G Sreelakshmi
16	A Novel Approach to Squaring Technique using Vedic Mathematics applied with EdSIM51	S.Sarma, Dr G.D.Babu
17	Vedic Mathematics - Driven Approach for NCERT Prescribed Mathematics Curriculum	Nitika Gupta
18	Equipping Engineering Students For Employment Through Vedic Mathematics	Anil A.R.
19	Calculating HCF and LCM Mentally	Kuldeep Singh
20	Connection of Vedic Mathematics to Modular Arithmetic	Usha Sundararaman
21	A New Approach to Solving Linear Equations	Ashwini Kale, Anant Vyawahare
22	Two Approximations of the Sine Function: A Comparison	Anant Vyawahare, Sanjay Deshpande
23	Mathematical Practices in the Regional Language Schools of Pre-Colonial India	Swati Dave
24	Advaita and the Sutras of Vedic Mathematics	James Glover