



School of Mathematical Sciences
North Maharashtra University, Jalgaon
Announcement of
Workshop on
***Lilavati*: Bhasaksracharya's Treatise**
(22.09.2017)



Background: Bhaskara was the greatest Indian Mathematician of 12th century. His main work reported through *Siddhanta Shiromani* which is divided into four parts called *Lilavati*, *Bijaganita*, *Grahaganita* and *Goladhyaya*. These four sections deal with arithmetic, algebra, mathematics of the planets, and spheres respectively. He also wrote another treatise named *Karana Kautuhala*. Bhaskara's work on calculus predates Newton and Leibnitz by over half a millennium. He is particularly known in the discovery of the principles of differential calculus and its application to astronomical problems and computations. While Newton and Leibnitz have been credited with differential and integral calculus, there is strong evidence to suggest that Bhaskara was a pioneer in some of the principles of differential calculus. He was perhaps the first to conceive the differential coefficient and differential calculus.

Objectives of Workshop:

- To introduce the work of Bhaskaracharya.
- To spread and popularize various Mathematical skills reported in Bhaskaracharya's treatise *Lilavati*.

About Speaker of the Workshop: Professor Sudhakar Agarkar

Dr. Sudhakar Agarkar is presently working as Professor and Dean at VPM's Academy of International Education and Research, Thane. After a long career in science and mathematics education at the Homi Bhabha Centre for Science Education (Tata Institute of Fundamental Research), Mumbai he retired on June 30, 2013. He has obtained his M.Sc. degree in Chemistry from the University of Nagpur in 1975 with university rank. He was awarded Ph.D. in science education by the University of Poona in 1988 for his work on Instructional Strategies to Overcome Difficulties in Learning Science and Mathematics (with Special Reference to Socio-economically Deprived Students). Over the past three decades he has made his name in the field of science and mathematics education.

Dr. Agarkar has varied professional experience of planning, implementation and evaluation of educational projects. He has conducted pioneering research in the field of science and mathematics education. In-service training of teachers and teacher educators is yet another area of work for Dr. Agarkar. He has conducted a large number of in-service training courses in science and mathematics education in India and abroad. Based on the experiences gained in these courses he has come out with a training module for practicing teachers and teacher educators. He has also brought out supporting instructional material in school science and mathematics to be used in day to day teaching. Science and mathematics popularization is an area of great interest for Dr. Agarkar. He enjoys answering children's questions, conducting lecture demonstrations, preparing scripts for radio and television and writing popular articles for newspapers and magazines. Based on his research and field experiences Dr. Agarkar goes on writing books. He has contributed chapters to five international publications. He has contributed to a series of eight books on Remedial Algebra and Remedial Geometry. He has brought out a series of three books on Activity based Teaching of Science for teachers. He has coauthored popular science books like A book on Science Quiz, How and Why in School Science, Use of Vacations for Students' Personality Development, Close look at China, Educational Tour of Oxford and Cambridge, etc. Dr. Agarkar has published more than 100 technical articles in peer reviewed reputed national and international journals. Dr. Agarkar is a globe trotter. He gets invitations to deliver lectures from various universities and institutions. He is also invited to give key note addresses and plenary lectures in national as well as international conferences.

Mode of Workshop: Interactive Lectures in two sessions by Prof. Agarkar

Who can attend: Students from School of Mathematical Sciences (maximum 150 on first come first basis).

Date and Time: September 22, 2017. 11.00 am to 1:00 pm (For Math) and 3:00-5:00 pm (For Stat and AS)

Venue: Seminar Hall, School of Mathematical Sciences, N.M.U. Jalgaon

Last Date of Registration: September 21, 2017 up to 1:30 pm.

Workshop Coordinator: Prof. R.L. Shinde, Director, School of Mathematical Sciences

Contact Person for registration: Dr. C. T. Aage, Workshop Co-Coordinator.

Members: Prof. S. R. Chaudhari, Dr. K. F. Pawar, Dr. K.K. Kamalja, Dr. H. L. Tidke, Mr. M. C. Patil, Mr. R. D. Koshti, Ms. R. M. Manekar, Ms. D. K. Ghade, Ms. J. A. Salunkhe