



## Vidya Prasarak Mandal

Vishnu Nagar, Naupada, Thane 400602

Phone : 022 25426270

# Bhāskara 900

International Conference on  
the 900th Birth Anniversary of  
BHĀSKARĀCĀRYA

Friday, 19th; Saturday, 20th & Sunday, 21st September 2014

Venue :

Thorale Bajirao Peshwe Sabhagruh  
'Jnanadweepa', Thane College Campus  
Chendani Bundar Road  
Thane, Maharashtra, India - 400 601

<http://www.vpmthane.org/bhaskara900/>

# Bhaskara 900

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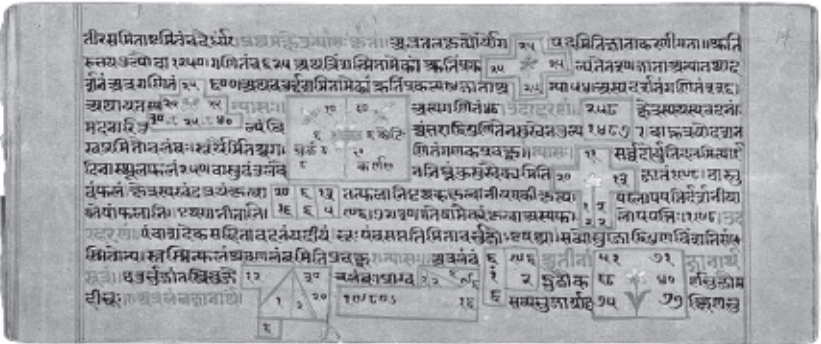
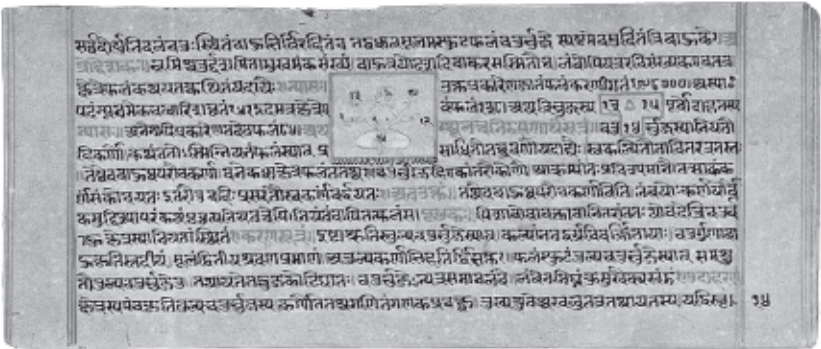
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# 1. Conference Organization

## 1.1 Welcome Message

To honour Bhāskarācārya, India's celebrated mathematician and astronomer, on the 900th anniversary of his birth, Vidya Prasarak Mandal, Thane, Maharashtra, is organizing an International Conference on Friday, 19th; Saturday, 20th and Sunday, 21st September 2014 at Thane, Maharashtra, India - 400 601.

Bhāskarācārya was born in 1114 in a family of scholars who cultivated Jyotisa as a family tradition for several generations. He mastered all the traditional branches of learning and made valuable contributions to mathematics and astronomy through his writings. Comprehensive treatment of the subject, careful organization of the material, lucid exposition and high poetic quality of his works made them near-canonical in the subsequent centuries. Bhāskarācārya works were studied throughout the country and several commentaries were composed on them.



## 1.2 About VPM, Thane

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Vidya Prasarak Mandal (VPM), Thane is an educational trust, established to provide educational facilities to the city of Thane. Starting with a modest beginning in 1935, it has now grown into an educational society which caters to the needs of about 15,000 students in the Thane campus, from kindergarten to post graduation in different disciplines of science and humanities, including law and polytechnic. Recently, VPM has set up an engineering College at Velneshwar, Guhagar Taluka, Ratnagiri District, Maharashtra in rural area. The list of institutions managed by VPM is given below (along with its year of establishment). Most of its institutions are affiliated to Mumbai University.

1. Dr. Bedekar Vidya Mandir, Thane (1957)
2. B. N. Bandodkar College of Science, Thane (1969)
3. K. G. Joshi College of Arts and N.G. Bedekar College of Commerce, Thane (1969)
4. VPM's TMC Law College, Thane (1972)
5. Dr. V. N. Bedekar Institute of Management Studies, Thane (1973)
6. Sau. A. K. Joshi English Medium School, Thane (1976)
7. VPM's Polytechnic, Thane (1983)
8. VPM's Advanced Study Centre, Thane (1996)
9. VPM's Polytechnic IT Centre, Thane (2000)
10. VPM's Centre for Foreign Languages, Thane (2008)
11. VPM's Department of Defense and Strategic Studies, Thane (2008)
12. VPM's London Academy for Education and Research, London (2009)
13. VPM's Academy of International Education and Research, Thane (2009)
14. VPM's Maharshi Parshuram College of Engineering, Velneshwar (2012)
15. VPM's Institute of Distance Education, Thane (2012)

More Details of Vidya Prasarak Mandal, Thane are available at <http://www.vpmthane.org>

### 1.3 Advisory Committee \_\_\_\_\_

**Vijay Vasudev Bedekar**

Chairman, Vidya Prasarak Mandal, Thane, India.

**Sreeramula Rajeswara Sarma**

Formerly Professor of Sanskrit, Aligarh Muslim University; currently at Duesseldorf, Germany.

**Michio Yano**

Professor, Kyoto Sangyo University, Kyoto, Japan.

**Takao Hayashi**

Professor, Science and Engineering Research Institute, Doshisha University, Kyoto, Japan.

**K. Ramasubramanian**

Associate Professor, Indian Institute of Technology, Mumbai, India.

**Arvind P. Jamkhedkar**

Retired Director, State Department of Archaeology and Museums, Maharashtra, India.

**Sudhakar Agarkar**

Dean, VPM's Academy of International Education & Research, Thane, India.

### 1.4 Organizing Committee \_\_\_\_\_

**Dr. Kamalakar Desai**

Director, VPM's Maharshi Parshuram College of Engineering, Velneshwar.

**Mr. D. K. Nayak**

Principal, VPM's Polytechnic, Thane

**Dr. Madhuri Pejavar**

Principal, B. N. Bandodkar College of Science, Thane

**Dr. Shakuntala A. Singh**

Principal, K. G. Joshi College of Arts & N. G. Bedekar College of Commerce, Thane

**Mrs. Srividhya Jayakumar**

In-Charge Principal, VPM's TMC Law College, Thane

**Dr. Guruprasad Murthy**

Director General, Dr. V. N. Bedekar Institute of Management Studies, Thane.

**Dr. Prabhakar Kelkar**

Dean, Dr. V. N. Bedekar Institute of Management Studies, Thane.

**Dr. Amit Oak**

Director, Dr. V. N. Bedekar Institute of Management Studies, Thane.

### 1.5 Participating Societies \_\_\_\_\_

Institute for Oriental Study, Thane

<http://www.orientalthane.com>

## 2. Conference Themes \_\_\_\_\_

The Conference will discuss the following themes :

- Bhāskarācārya's Life and Times, Inscriptional and other Evidence.
- Bhāskarācārya's Poetic Genius.
- The Līlāvātī, its importance and influence on subsequent writings.
- Commentaries on the Līlāvātī, especially Gaṇeśa Daivajña's Buddhivilāsinī .
- Persian translation of the Līlāvātī by Abū al-Fayḍ Fayḍī at the court of Akbar.
- The Legend of Līlāvātī .
- Any other topic related to the Līlāvātī.
- The Bījagaṇita, its importance and influence.
- Commentaries on the Bījagaṇita, especially Kṛṣṇa Daivajña's Navāṅkura.
- Persian Translation of the Bījagaṇita by 'Ata' Allāh Rushdī.
- Any other topic related to the Bījagaṇita.
- The Siddhāntaśiromaṇi, its importance and influence.
- Commentaries on the Siddhāntaśiromaṇi, especially Nṛsiṃha Daivajña's Vāsanāvārttika.
- Astronomical Instruments in the Siddhāntaśiromaṇi.
- The Jyotpatti chapter in the Siddhāntaśiromaṇi.
- Any other topic related to the Siddhāntaśiromaṇi.
- The Karaṇakutūhala.
- Bhāskarācārya's commentaries on his own Siddhāntaśiromaṇi and on Lalla's Siṣyadhīvr̥ddhidatantra.
- Bhāskarācārya's legacy.

### 3. Events

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#### 3.1 Pre Conference Workshops

Through his various works, Bhāskarācārya has left a legacy of strong tradition of mathematics in India. Especially his Līlāvātī, which seeks to teach arithmetic and geometry playfully through highly poetic examples, has a great relevance to school mathematics today. Unfortunately, a large number of school teachers and students are unaware of this fact. There is, therefore, a need to create awareness among these stakeholders about Līlāvātī and explain to them its relevance in modern world.

As a part of Bhāskara 900, an international conference to commemorate the 900th birth anniversary the great Indian mathematician Bhāskarācārya, it is planned to arrange a series of workshops on the Līlāvātī for mathematics teachers, where attempts will be made to explain the algorithms and examples given in the Līlāvātī in simple Marathi. The techniques suggested by Bhāskarācārya would be discussed and ways and means to utilise them in day- to-day teaching will be clarified.

It is proposed to organise two-day workshops at suitable places in the state of Maharashtra starting from November 2013. The participant will have to pay Rs. 1,000/- (Rupees One Thousand Only) to attend the workshop. Interested teachers should contact Prof. Agarkar at the following address.

**Prof. S. C. Agarkar**

Dean,

VPM's Academy of International Education and Research  
Vidya Prasarak Mandal,

Vishnu Nagar, Naupada, Thane 400602, MS, India.

Email : [sagarkar@vpmthane.org](mailto:sagarkar@vpmthane.org)

### 3.2 Conference Programme

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Tentative programme will be as follows

#### Friday, 19th September 2014

08.00 – 09.00 hrs.	Breakfast
09.30 – 13.00 hrs	Morning Session
13.00 – 14.00 hrs.	Lunch
14.00 – 17.30 hrs.	Afternoon Session
18.30 – 20.00 hrs.	Cultural Programme
20.15 – 21.30 hrs.	Dinner

#### Saturday, 20th September 2014

08.00 – 09.00 hrs.	Breakfast
09.30 – 13.00 hrs	Morning Session
13.00 – 14.00 hrs.	Lunch
14.00 – 17.30 hrs.	Afternoon Session
18.30 – 20.00 hrs.	Cultural Programme
20.15 – 21.30 hrs.	Dinner

#### Sunday, 21st September 2014

08.00 – 09.00 hrs.	Breakfast
09.30 – 13.00 hrs	Morning Session
13.00 – 14.00 hrs.	Lunch
14.00 – 15.30 hrs.	Concluding Session

### 3.3 Cultural Programme

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Friday, 19th Sept 2014,

6.30 PM to 8 PM - Cultural Programme

Saturday, 20th Sept 2014,

6.30 PM to 8 PM - Cultural Programme

Cultural Programme will include Indian Classical, Vocal, Musical performance.



#### 4. Abstracts & Papers

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Those who wish to participate in the conference and present papers on one of themes mentioned in “Themes of the Conference” should submit an abstract of about 200 to 300 words, stating clearly the original contribution of the author. Each paper will be given 20 minutes for presentation and 10 minutes for discussion. The abstract should be typed using Times New Roman 12 point in a single spacing. It can be either be uploaded to the website or sent as an attachment through email message. The last date for submitting the abstract is Monday, 31st March 2014.

The acceptance (or otherwise) of submitted abstracts will be communicated to authors by Saturday, 31st May 2014. The participants are expected to submit the full papers at the time of the conference. The papers and invited lectures will be published in the Proceedings of the Conference.

After the abstract is accepted, the registration fees should be paid as early as possible, but latest by Thursday, 31 July 2014. Otherwise their names will not be included in the programme and their abstracts will not be put online.



## 5. Sponsorship & Exhibition

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The forthcoming conference (Bhaskara 900) would bring together about 200 academicians in the field of mathematics and mathematics education from different parts of the world. Educational institutions, book publishers and philanthropic organizations have ample opportunities to get associated with it.

### Sponsorship

1. Platinum Sponsorship- INR 5,00,000/- (Rupees Five Lakhs only)
2. Gold Sponsorship- INR 3,00,000/- (Rupees Three Lakhs only)
3. Silver Sponsorship- INR 2,00,000/- (Rupees Two Lakhs only)

### Exhibition

1. A book stall: Publishers might like put up a stall during the period of the conference. They will be provided adequate space to store and display their material. The charges for such a stall would be Rs. 10,000 (Rupees Ten thousand only) for the entire period of the conference.
2. A toy stall: A substantial number of groups now manufacture educational toys. They will be provided adequate space to store and display their material. The charges for such a stall would be Rs. 10,000 (Rupees Ten thousand only) for the entire period of the conference.
3. Lab material stall: Along with books and toys there is scope for selling lab materials during the conference. The manufacturers or dealers of lab material will be provided adequate space to store and display their material. The charges for such a stall would be Rs. 10,000 (Rupees Ten thousand only) for the entire period of the conference.

## 6. Registration

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### 6.1 Registration Fees

Early Bird Registration will be open upto Thursday, 31st July 2014. Registration fees for early Birds will be :

Indian Delegates	:	₹ 3,000/-
Foreign Delegates	:	US \$ 150/-
Sympathizer	:	₹ 5,000/-

Late Registration ( After Friday, 1st August 2014 ) fees will be as follows.

Indian Delegates	:	₹ 5,000/-
Foreign Delegates	:	US \$ 200/-

For Accommodation details,

Please visit Website : [bhaskara900@vpmthane.org](mailto:bhaskara900@vpmthane.org)



## About Thane

Thane city comes under Mumbai Metropolitan Region. Thane is 34 kilometers away from Chatrapati Shivaji Terminus, Mumbai. It has a population of more than 1.8 million within its municipal limits. It has a predominantly Maharashtrian culture, but it has a cosmopolitan culture as well.

Thane is an ancient city. The earliest evidence of Thane appears in the works of the Greek geographer, Ptolemy, who, in his writings (135 - 150 AD) refers to a place called Chersonesus, which, according to researches, is the area around Thane creek. It was a well developed port & was used for trading and exporting leather, buckram, cotton, and importing horses during 13th century.

Thane was ruled by Rastrakutas (Sanskrit: राष्ट्रकुट *rāṣṭrakūṭa*) and then their feudatory Shilaharas from 8th to 12th century followed by Yadavas, Gujarat Sultans, Portuguese and then British till 1947.

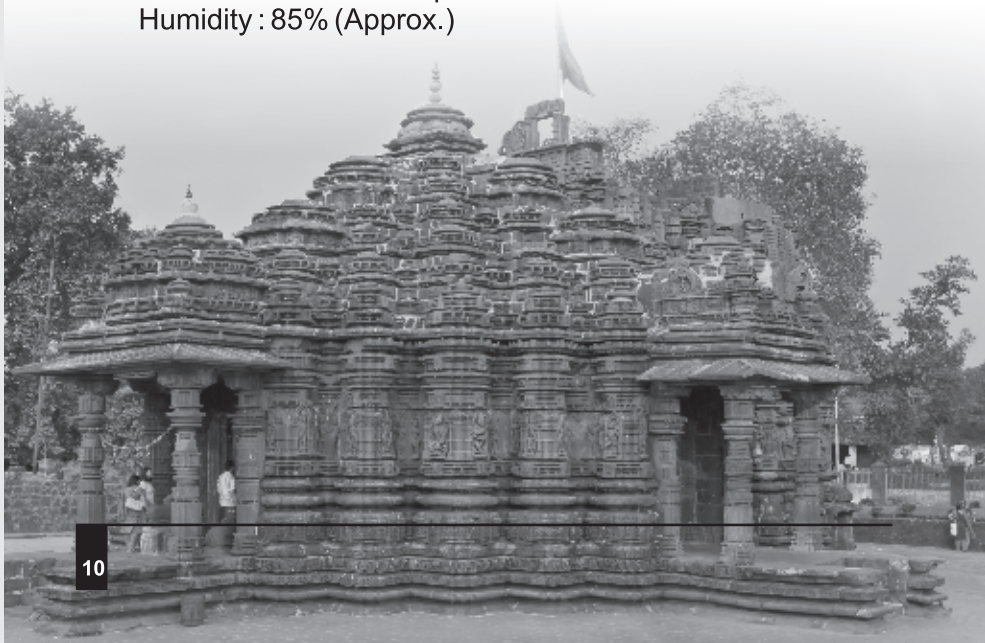
Thane was the terminus for the first ever passenger train in India. On 16 April 1853, the first passenger train service was inaugurated between Chatrapati Shivaji Terminus (erstwhile Victoria Terminus) and Thane. Thane is also known as the City of Lakes. The city has around 12 lakes now.

### Climate of Local

Temperature : 22 °C - 36 °C

Occasional showers expected

Humidity : 85% (Approx.)



**6.2 Registration Form for conference of “Bhāskara 900”**

Date \_\_\_\_\_

To,  
 The Chairman,  
 Vidya Prasarak Mandal,  
 Dr. Bedekar Vidya Mandir,  
 Naupada, Thane (West) – 400602  
 Maharashtra, India.

Name : \_\_\_\_\_

Age : \_\_\_\_\_

Gender:  Male  Female

Organisation / College : \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Country: \_\_\_\_\_ Pincode: \_\_\_\_\_  
 \_\_\_\_\_

Email Id: \_\_\_\_\_

Registration Type:  Indian  Foreign  Sympathizer

DD Amount: \_\_\_\_\_

Issuing Bank : \_\_\_\_\_

Branch: \_\_\_\_\_

Date of DD: \_\_\_\_\_

Demand Draft in the name of  
**Vidya Prasarak Mandal, Thane,**  
 payable at Thane.

Signature



To,  
The Chairman  
Vidya Prasarak Mandal  
Dr. Bedekar Vidya Mandir  
Naupada, Thane (West) – 400602  
Maharashtra, India.

## 7. Conference Venue \_\_\_\_\_

The conference will be held at Thorale Bajirao Peshwe Sabhagruh, "Jnanadweepa", Thane College Campus, Thane, Maharashtra, India.

## 8. Contact Details \_\_\_\_\_

Registrar

Vidya Prasarak Mandal

Vishnu Nagar, Naupada, Thane 400602, MS India.

Email : bhaskara900@vpmthane.org

## 9. Important Links \_\_\_\_\_

### 1. General

❖ [www.vpmthane.org](http://www.vpmthane.org)

### 2. Bhāskarācārya

❖ Bhāskara II

[http://en.wikipedia.org/wiki/Bh%C4%81skara\\_II#CITEREFPingree1970](http://en.wikipedia.org/wiki/Bh%C4%81skara_II#CITEREFPingree1970)

<http://www.britannica.com/EBchecked/topic/64067/Bhaskara-II>  
(Britanica)

[http://www-history.mcs.st\\_and.ac.uk/Biographies/Bhaskara\\_II.html](http://www-history.mcs.st_and.ac.uk/Biographies/Bhaskara_II.html) (MacTutor Biography)

<https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-geometry/cc-8th-pythagorean-proofs/v/bhaskara-s-proof-of-pythagorean-theorem-avi>

❖ Līlāvati

<http://en.wikipedia.org/wiki/Lilavati>

❖ Bījagaṇita

<http://en.wikipedia.org/wiki/Bijaganita>

❖ Siddhāntaśiromaṇi