Mathematics Department of Banaras Hindu University (BHU) is organizing an International Conference on **Modeling and Simulation of Diffusive Processes and Applications** (ICMSDPA14) during **October 29-31, 2014**. This is the second edition of ICMSDPA, the first conference was organized in BHU by the Computer Science Department during October 9-12, 2012.

The objective of the conference is to bring together experts and researchers from various disciplines like computing science, applied mathematical sciences, natural resource management, environmental and atmospheric sciences, applied geo-sciences, traditional engineering disciplines, agricultural sciences, theoretical medical sciences, etc. for sharing of ideas and reporting of their research results.

Many natural phenomena like air, soil, water, and groundwater pollution, sea water intrusion, controlled release of nutrients from coated fertilizer granules, release from encapsulated medicinal pellets, transport across the cellular membranes, etc. all involve diffusive processes. The medium of the diffusive processes, in general, is heterogeneous and the sources may be stationary or moving. Diffusion of information is also used in many areas of computing and computational processes. Handling these problems requires modeling based on diffusion equation, computer simulation, and analysis. The conference aims to provide a platform for exchanging ideas on these and closely related areas.

**Key dates**
- **June 30, 2014**: Papers to be sent by email to icmsdpa14@gmail.com in IEEE format (.doc), max size 600KB.
- **August 17, 2014**: Review reports.
- **September 30, 2014**: Camera-ready papers

**Major areas**
- Diffusive Processes: Theory
- Numerical Computation in Diffusive Processes
- Diffusive Process Applications in Agricultural Sciences
- Diffusive Process Applications in Biology and Medicine
- Diffusive Process Applications in Science and Engineering
Where and How Do We Meet

The City

Varanasi, also commonly known as Benares or Banaras and Kashi, is a city (area 73.89 sq. km) situated on the bank of the river Ganges at an altitude of 80.71 metres above the sea level in the Indian state of Uttar Pradesh and is 700 kilometers (760 kms.) southeast of the Indian capital Delhi. The summer temperature ranges between 32 and 43, and the winter temperature ranges between 5 and 15 on the Celsius scale. The annual rainfall is approximately 111 cms. It is regarded as a holy city by Hindus, Buddhists, and Jains. The languages spoken are Hindi, Urdu, and English. It is one of the oldest continuously inhabited cities in the world and probably the oldest in India. Its name appears in the Hindu sacred book, Gita. The culture of Varanasi is closely associated with the river Ganges and its religious importance. The city has been a cultural and religious centre for several thousand years. People often refer to Varanasi as "the city of temples", "the holy city of India", "the religious capital of India", "the city of lights", and "the city of learning." The Benares Gharana form of the Indian classical music was developed in Varanasi, and many prominent Indian philosophers, poets, writers, and musicians resided, or reside, in Varanasi. After having enlightenment at Bodh Gaya (260 kms. from Varanasi), Lord Buddha gave his first sermon at Sarnath, located at a distance of 20 kms. from Banaras Hindu University. The best time to visit Varanasi is between October and March.

How to Reach

The city is connected by air (1 hour flight) and railways (12 hours) to Delhi, Kolkata and also to Mumbai (2 hours by air and 28 hours by train). Southern cities of Chennai and Bangalore are connected by trains (40 hours) and 4-5 hours by air, with one intermediate stop.

The Host

Banaras Hindu University (BHU) was founded by Pt. Madan Mohan Malviya, a great statesman, philosopher, and visionary. BHU is a leading university in India and funded wholly by the Government of India. It attracts students from all parts of India and many foreign countries. This university has produced a number of renowned scientists, humanists, statesman, philosophers, musicians, etc. It offers instructions in both modern and traditional pedagogy. It has two campuses, 3 institutes, 16 faculties, 140 departments, 4 advanced centers and 4 interdisciplinary schools. The University is making its mark at the national and international levels in a number of frontier areas of human endeavors. BHU today has nearly twenty thousand students including 2500 research scholars and 650 foreign students from 34 nations, pursuing different academic programmes in its lush green main campus.

The Department

The Department of Mathematics was founded in 1898 as a part of the Central Hindu College at Kamachha, Varanasi much before the establishment of the Banaras Hindu University in 1916. Subsequently in 1917, Department of Mathematics along with the Central Hindu College was transferred to the Banaras Hindu University. The Department had the privilege of having had eminent scholars on its faculty. The teachers of the Department have been receiving national and international recognition and financial support for their high quality research.

Accommodation

BHU has a number of guest houses in the campus. Moreover, a number of hotels, with varying tariffs, are available in the city to cater to the requirements of the delegates.
Registration Form

(Please fill out this form and then scan and mail to (i) icmsdpa14@gmail.com with cc to (ii) navkumar50s@gmail.com)

First Name: Family Name:
Father’s Name:
Nationality:
Date of Birth: Place of Birth:
Passport Number*:
Date and Place of issue of Passport*:
Expiry Date of Passport*:
Address:
Position:
Institute/Organization:
Email Address: Tel:

A registration fee (covering expenses towards food, refreshments & conference kits, etc.) for participation in ICMSDPA14 is to be paid, as per the details below:

<table>
<thead>
<tr>
<th>REGISTRATION FEES</th>
<th>Deadline</th>
<th>International</th>
<th></th>
<th>Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Delegates</td>
<td>Student*</td>
<td>Delegates</td>
</tr>
<tr>
<td>Early registration</td>
<td>September 30, 2014</td>
<td>US$ 275</td>
<td>US$ 160</td>
<td>Rs. 2700</td>
</tr>
<tr>
<td>Late registration</td>
<td>October 15, 2014</td>
<td>US$ 300</td>
<td>US$ 175</td>
<td>Rs. 3000</td>
</tr>
</tbody>
</table>

*Student fee refers to fulltime post-graduate and doctoral students.

+Mandatory for foreign nationals

Registration can be paid by (1) bank cheque/draft, (2) electronic transfer, or (3) cash.