

VENUE AND LOCATION

The symposium will be held at Kadavu Resort, Calicut, Kerala, India (<http://www.kadavuresorts.com/>).

India is one of the oldest civilizations in the world with a kaleidoscopic variety and rich cultural heritage. *Incredible India* (<http://www.incredibleindia.org>) has achieved multifaceted socio-economic progress during the last 62 years since its independence. Kerala, popularly known as *God's own country*, is a beautiful state situated in the southern part of India (<http://www.keralatourism.org>).

Kadavu Resort is a luxurious resort hotel in the historic Calicut (Kozhikode) city of Kerala State. Calicut, the most important city in the Malabar region of Kerala, found a place in world history with the discovery of the sea route to India in 1498 by the Portuguese navigator Vasco Da Gama. Basking in the idyllic setting of the Arabian Sea on the west and the proud peaks of the Wayanad hills on the east, Calicut is known for its serene beaches, lush green countryside, historic sites, calm backwaters, wildlife sanctuaries, rivers, waterfalls and ayurvedic treatment. The Kadavu Resort is located on the backwaters with groves of swaying, graceful coconut palms facing the dancing ripples on the water. It is situated 14 kms away from Calicut city.

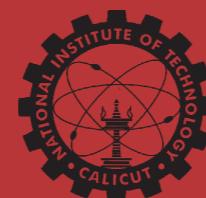
LOCAL ATTRACTIONS

Calicut, also known as Kozhikode, was once ruled by the 'Samootheri' dynasty (*Zamorins*, as called by the Portuguese), and later became part of the erstwhile Malabar District. It is known as the city of spices and is a major center of domestic trade activities. Kozhikode Beach, Mananchira Square, Kappad Beach, Kadalundy Bird Sanctuary, Beypore, Thusharagiri Waterfalls, Pazhassiraja Museum, Thali Temple, Mother of God Cathedral and Kuttichira Masjid are some of the local attractions which are naturally inherited with rich flora and fauna. The coconut trees that streamline the vast area of this region adds exciting view to the scenic beauty of the entire city. Multi cuisines like Malabar Biryani, Sadya, Banana Chips and Kozhikode Halwa are quite appetizing for the tourists who really like exploring different cuisines.

Wayanad (<http://wayanad.nic.in>), the land of spicy hills, is about 70 kms away from Calicut city. This green paradise is nestled among the mountains of the Western Ghats and is known for its pristine beauty. The leading tourist centres of South India like Ooty, Mudumalai, Bandipur, Nagarhole, Mysore, Bangalore and Madikeri are around this region. The Wayanad district offers excellent wildlife viewing opportunities, an insight into tribal culture evocative of earlier centuries, trekking and other adventure activities, and a variety of remote monuments. For wildlife enthusiasts and nature lovers, Wayanad's wildlife sanctuaries are must visit destinations. Pookode Lake, Lakkidi View Point, Banasugara Sagar Lake, Thirunelli Temple, Papanasini, Pakshi Paathaalam, Tholpetty Wild Life Sanctuary, Kuruva Island, Muthanga Wild Life Sanctuary, Edakkal Caves, Ambalavayal Heritage Museum, Meenmutty Waterfalls, Kanthanpara Waterfalls, Soolichippara Waterfalls and Chembra Peak are the major attractions in Wayanad. Almost all crops such as tea, coffee, black-pepper, ginger, turmeric, cocoa, areca nut, rubber and vanilla are grown here. Black pepper produced from this hill station is famous in the global spice market for its unique quality and aroma.



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<http://www.isb2010.org>

TRAVEL

By Air- You can fly to Calicut or Cochin International Airports in India, directly from your country. There are domestic flights to Calicut from other major airports in India like Mumbai, Chennai, Delhi, Bangalore, Goa, Mangalore, Coimbatore, Cochin and Trivandrum. Calicut International Airport is just 12 kms and Cochin International Airport is 160 kms away from Kadavu Resort (venue of the symposium).

By Rail- Direct trains are available to Calicut (Kozhikode) from all major cities in India.

By Road- Luxury Buses are available from Mumbai and major cities in South India to Calicut.

ACCOMMODATION

Calicut is well known for its hospitality. Hotels here provide spectacular services that add memorable experience for the tourists visiting this dream destination. Low budget and luxurious hotels in Calicut are quite compatible to the needs of the tourists because they are pocket friendly and provides good stay. Special yoga lounge and ayurvedic treatment are added facilities provided at major hotels in Calicut, attracting both domestic as well as international travellers.

More details about hotels in Calicut are available at the following links:

<http://www.hotelskerala.com/kozhikode.htm>

<http://www.travelmasti.com/calicut.htm>

<http://www.kozhikode.com/>

For any assistance regarding accommodation, please mail to isb2010@nitc.ac.in with the subject 'Accommodation'.

International Symposium on Biocomputing

15 – 17 February, 2010

Calicut, Kerala, India



INTRODUCTION

The last decade has witnessed a spurt in life science research with the advent of high throughput instrumentation technologies. Classical biological problems got transformed dramatically with the emergence of Computational Biology as an active area of research and development that stemmed from the concerted effort of pioneering scientists. Against the backdrop of the successful sequencing of the human genome, far-reaching discoveries are constantly being made. Advances such as genome-sequencing initiatives, microarrays, proteomics and structural genomics have pushed the frontiers of human knowledge. The staggering volume of data generated from different "omics" experiments has stymied integration of experimental procedures and computational activities. In the present global scientific arena, Bioinformatics has thus evolved as a complementary tool to biologists, assisting in interpretation of experimental data and also providing important leads for further experimental research.

The post-genomic era is witnessing the emergence of vast databanks to store the genetic codes that describe a multitude of organisms. Innovative Bioinformatics algorithms and techniques are being developed to help the biologists to analyze and interpret biological sequences and structures, thus unraveling life's mysteries. The field of Biocomputing is fast developing as a multidisciplinary topic of research, ultimately aimed at improving the quality of life. The International Symposium on Biocomputing (ISB 2010), organized in cooperation with the Association for Computing Machinery (ACM), provides a common platform for researchers from Computer Science, Life Science and Statistics areas to exchange their ideas and hypotheses.

OBJECTIVES

The primary objective of the symposium is to promote future collaborations between researchers in the areas of Computer Science and Life Sciences towards the development of efficient Bioinformatics algorithms and tools. The symposium is also expected to witness the initiation of multidisciplinary interactions, which will eventually blur the boundaries between *in vivo*, *in vitro* and *in silico* analytical procedures, and thus help to gain deeper understanding of macromolecular interactions, which ultimately define any biological system.

CALL FOR PAPERS

Original unpublished research papers are invited in the following research areas, but not limited to:

- Gene Annotation and Sequence Analysis/ Alignment/ Pattern Searches
- Modeling Approaches and Protein Structure Prediction
- Comparative Genomics and Phylogenetics
- Proteomics and Transcriptomics
- Systems Biology and Quantitative Bioanalysis
- Interactomics and Gene/ Cell Regulation
- Microarrays, Networks/ Pathway Analysis
- Data Mining, Text Mining and Machine Learning
- Modeling/ Simulation of Drug Discovery Processes
- Signal Processing for Biotechnology
- Nanomachines and Biotechnology
- Biomedical Imaging/ Visualization Tools for "Omics" data

Submissions will be blind-reviewed by peer groups with expertise in various focus areas. Accepted papers will be published in the ACM digital library. The International Journal of Data Mining and Bioinformatics (IJDMB) has agreed to publish extended version of selected papers from the symposium. Submission guidelines can be found in ISB 2010 Website (<http://www.isb2010.org>). Papers should be submitted through the eCMS submission system: <http://icarus.cs.iupui.edu/isb2010/>.

ORGANIZING INSTITUTES

National Institute of Technology Calicut (NITC) is one of the premier national institutions of technical education managed by the Ministry of Human Resources Development, Government of India (<http://www.nitc.ac.in>). Set in a picturesque landscape at the foothills of the Western Ghats, NITC is located about 22 kilometers east of Calicut city of Kerala State and offers a placid environment for learning and research. The institute is offering academic programmes leading to B. Tech., M. Tech., MCA and Ph. D degrees in Engineering and Science disciplines.

Indiana University Purdue University, Indianapolis (IUPUI) is one of the top upcoming American universities (<http://www.iupui.edu>). IUPUI encompasses 20 schools and academic units which grant degrees in more than 200 programs from both Indiana University and Purdue University. Its location within blocks of downtown Indianapolis facilitates advancement of research and teaching, and presents unique opportunities for internships, partnerships, community engagement, and more.



IMPORTANT DATES

October 15, 2009
Paper submission

November 20, 2009
Acceptance notification

December 01, 2009
Camera-ready Copy

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REGISTRATION

Every accepted paper must be registered to ensure that the paper is included in the symposium proceedings. Only registered authors are allowed to present their papers. Registration fee covers coffee breaks, working lunch, symposium kit, banquet dinner and the symposium proceedings in CD-ROM.

Registration fee*	Students	Academic/ Govt. R&D Organizations	Industry
Participants from Developing/ Emerging Economies http://www.world-research-institutes.org/developing.html	INR 2000/- (USD 50)	INR 3000/- (USD 65)	INR 5000/- (USD 110)
Participants from other countries	USD 100	USD 200	USD 300

* ACM members are eligible for 10% discount in all categories.

