

I4AM'24 Conference Programme Schedule

		Time IST	Robotics Challenge
DAY 0	10-01-2024	08:00-09:00	Registration: (open to all student participants of I4AM'24 and other students registering only for robotic challenge) Venue: MMCR, CPDM IISc Bangalore
		09:00-09:30	Competition briefing
		09:30-10:00	Team formation and documents, kits distribution
		10:00-11:30	Robot assembly
		11:30-12:00	Tea/Coffee
		12:00-13:00	Robot assembly
		13:00-14:00	Lunch Break
		14:00-16:45	Robot assembly and algorithm testing
		16:45- 1700	Tea/Coffee
		17:00-19:00	Performance Evaluation

Day 1	11-01-2024	Time IST	Presentation of Research Papers, Keynotes, Panel Discussions
		07:30-08:00	Breakfast (JN Tata Lower Foyer area)
		08:00-09:00	Registration Venue: JN TATA Auditorium
		09:00-11:00	Plenary Session
			Inaugural- Chief Guest: Shri Vijay Mittal, Joint Secretary, MHI (TBC) Prof. B Gurumoorthy (Chair of Steering Committee I4AM24), Prof. Amaresh Chakrabarti (Co-Chair, I4AM24), Prof. Satyam Suwas (Co-Chair, I4AM24), Prof. Manish Arora (Vice-Chair, I4AM24) Venue: JN Tata Main Auditorium
			KN 1: Prof. Sundar Krishnamurty, University of Massachusetts, Amherst Chair- Prof. Satyam Suwas
			KN 2: Mr. Parasuraman TR, Chairman ASSOCHAM State Development Council, Chairman Karnataka State Development Council Chair-Prof. Satyam Suwas
		11:00-11:30	Session Break + Registration + Tea (JN Tata Lower Foyer area)
		11:30-1300	KN 3: Prof. Suhas S. Joshi, Indian Institute of Technology Indore, India Chair-Prof. Manish Arora
			KN 4: Prof. Sathyan Subbiah, Indian Institute of Technology Madras, India Chair-Prof. Manish Arora
13:00-14:00	Lunch Break (JN Tata Lower Foyer area) + Photo Session (Backside JN Tata)		
14:00-16:00	Panel 1: Challenges, Opportunities, and Initiatives by/for Strategic Sectors in Industry 4.0 and Advanced Manufacturing Panelists- Dr. S Dwarakanath (Chair), Shri Vikas Dogra (Director, MHI (TBC)), Shri RK Ramanathan, Shri FR Singhvi, Dr Kallappa Pattada; Mr Jagannathan, Dr Adishesha Sivaramasastry Venue: JN Tata Main Auditorium		
	Panel 2: Challenges, Opportunities, and Initiatives by the Government and Industry		

	Panelists- Dr. Purnendu Sinha (Chair), Shri S Manohar, Shri Anup Wadhwa, Dr. Nagahanumaiah, Prof. Ramesh Babu, Shri Venu Allam Venue: JN Tata Main Auditorium				
	16:00-16:30	Session Break + Tea (JN Tata Lower Foyer area)			
	16:30-18:30	Parallel Session 1	Parallel Session 2	Parallel Session 3	Parallel Session 4
		JN Tata Main Hall	Hall A	Hall B	Hall C
		Digital Manufacturing	Materials Processing & Joining	Industry X.0	Training and Education
		Chair: Senthil Kumaran	Chair: A M Kuthe	Chair: Biranchi Panda	Chair: Srinivasan Venkataraman
		2	17	6	12
		15	34	9	55
		22	35	14	57
		24	46	38	83
29		51	42	84	
30		61	54	89	
31	66	58			
	69				
18:30-19:00	Visit to IISc Smart factory - Venu Allam				
19:00-21:30	Conference Dinner @ Jawahar Lawn IISc Bangalore				

Day 2	12-01-2024	Time IST	Presentation of Research Papers, Keynotes, Panel Discussions			
		07:30-08:00	Breakfast (JN Tata Lower Foyer area)			
		08:00-09:00	Registration Venue: JN TATA Auditorium			
		09:00-11:00	Parallel Session 1	Parallel Session 2	Parallel Session 3	Springer Workshop
			JN Tata Main Hall	Hall A	Hall B	Hall C
			Digital Manufacturing	Materials Processing & Joining	Sustainable Manufacturing + Controls, Autonomous Systems, Robotics	Publishing Workshop
			Chair: Kusum Meena	Chair: Abhik Choudhury	Chair: S Vinodh	Chair: Swati Meherishi, Springer
			37	73	94	
			41	75	25	
			44	82	36	
50	85		62			
56	86		71			
70	92		74			
77		88				
		95				
11:00-11:30	Session Break + Tea (JN Tata Lower Foyer area)					
11:30-13:00	KN5: Prof. Ashitava Ghosal, ME IISc Bangalore Chair-Prof. Satish Vasu Kailas Venue: JN Tata Main Auditorium					
	KN6: Dr. S. Devarajan, President, BCIC 2023-2024, Bengaluru, India Chair-Prof. Satish Vasu Kailas Venue: JN Tata Main Auditorium					
13:00-14:00	Lunch Break (JN Tata Lower Foyer area)					
14:00-15:00	<p>Panel 3: Challenges, Opportunities, and Initiatives in Training and Education of Advanced Manufacturing and Industry 4.0</p> <p>Panelists- Prof. B Gurumoorthy (Chair), Prof Rishikesha Krishnan, Prof Satish Vasu Kailas, Dr U Chandrasekhar, Dr S RaviShankar, Shri AN Chandramouli</p> <p>Venue: JN Tata Main Auditorium</p>					

		Parallel Session 1	Parallel Session 2	Parallel Session 3	Parallel Session 4
		JN Tata Main Hall	Hall A	Hall B	Hall C
	15:00-16:00	Digital Manufacturing	Industry X.0	Policy & Entrepreneurship	Supply Chains
		Chair: Riby Abraham Boby	Chair: Rajnish Mallick	Chair: Srinivasan Venkataraman	Chair: Bisheshwar Haorangbam
		79	78	10	13
		93	80	20	16
		97	99	65	52
				67	
	16:00-16:30	Session Break + Tea (JN Tata Lower Foyer area)			
	16:30-17:00	Visit to IISc Smart Factory- Venu Allam			
	17:00-18:30	<p>Robotics Shortlist Presentations and Prizes Chair: Abhra Roy Chowdhury, Sanjeev Shrivastava (TBC) Jury: Dibakar Sen, Ashitava Ghosal, Abhijit Biswas, Pradipta Biswas</p> <p>Best Paper Awards and Valedictory Amaresh Chakrabarti, Swati Meherishi Venue: JN Tata Main Auditorium</p>			
	18:30-19:00	Vote of Thanks and High Tea (JN Tata Lower Foyer area)			

General Information

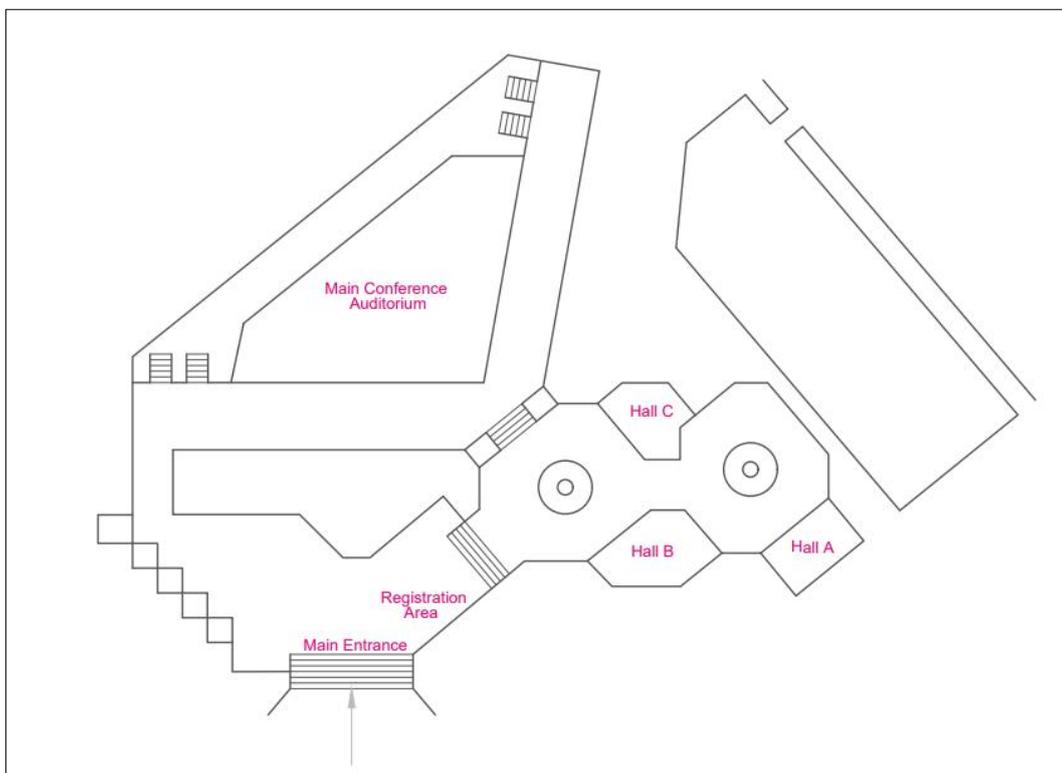
Entry at IISc

Please keep your ID proof, copy of your invitation letter, and/or an email confirming your accommodations handy for the entry purposes in IISc.

There are two entry gates to the JN Tata auditorium. One gate at CV Raman Road and one gate at Maramma Circle. Participant arriving directly at the venue can take entry from any of two gates.

About the Conference Venues

J. N. Tata Auditorium, National Science Seminar Complex, is well designed facility for organizing conferences. The Complex has the main auditorium for plenary/ parallel sessions and three halls (Hall A, Hall B and Hall C) for parallel sessions. Majority of the I4AM'24 events- including registration, plenary sessions, lunch- will take place at National Science Seminar Complex, IISc. In addition, four of the parallel sessions- PS 1 to 4 - will also take place at the same complex.



Layout: National Science Seminar Complex (Conference venues)

On day 1 and 2, visit to smart factory will happen at Department of Design and Manufacturing.

On day 1, the conference dinner will take place at Jawahar Lawn, Gymkhana, IISc.

The location of each venue is given in the table below:

JN Tata Auditorium,
National Science Seminar Complex



Smart Factory, CPDM



Jawahar Lawn, Gymkhana, IISc



The main auditorium and seminar halls are fully air-conditioned, with excellent stage visibility. State-of-art projection and sound systems are in place. The complex is located on southern part of the campus, set in a serene atmosphere, ideal for scientific sessions. Parking space is also available.

Information about Guest Houses

Delegates and participants who planned to stay in the guest houses provided by the organisers can find the information on address, location, and contact number below. The list of guests has been given to the respective guest houses by the organiser.

Main Guest House (MGH), IISc

Address: Tala Marg, IISc, CV Raman Rd, Bengaluru, Karnataka 560012

Entry point: Main gate of IISc

Contact No: 080 2360 0757



Centenary Visitors' House (CVH), IISc

Address: Centenary Guest House Road, IISc, CV Raman Rd, Bengaluru, Karnataka 560012

Entry point: Main gate of IISc

Contact No: 08022933500



Hoysala House, IISc

Address: Amra Marg, IISc, Devasandra Layout, Bengaluru, Karnataka 560012

Entry point: Main gate of IISc

Contact No: 080 22932535



Information about Restaurants inside IISc

Sarvam Food Complex



Nesara Restaurant



Food Truck



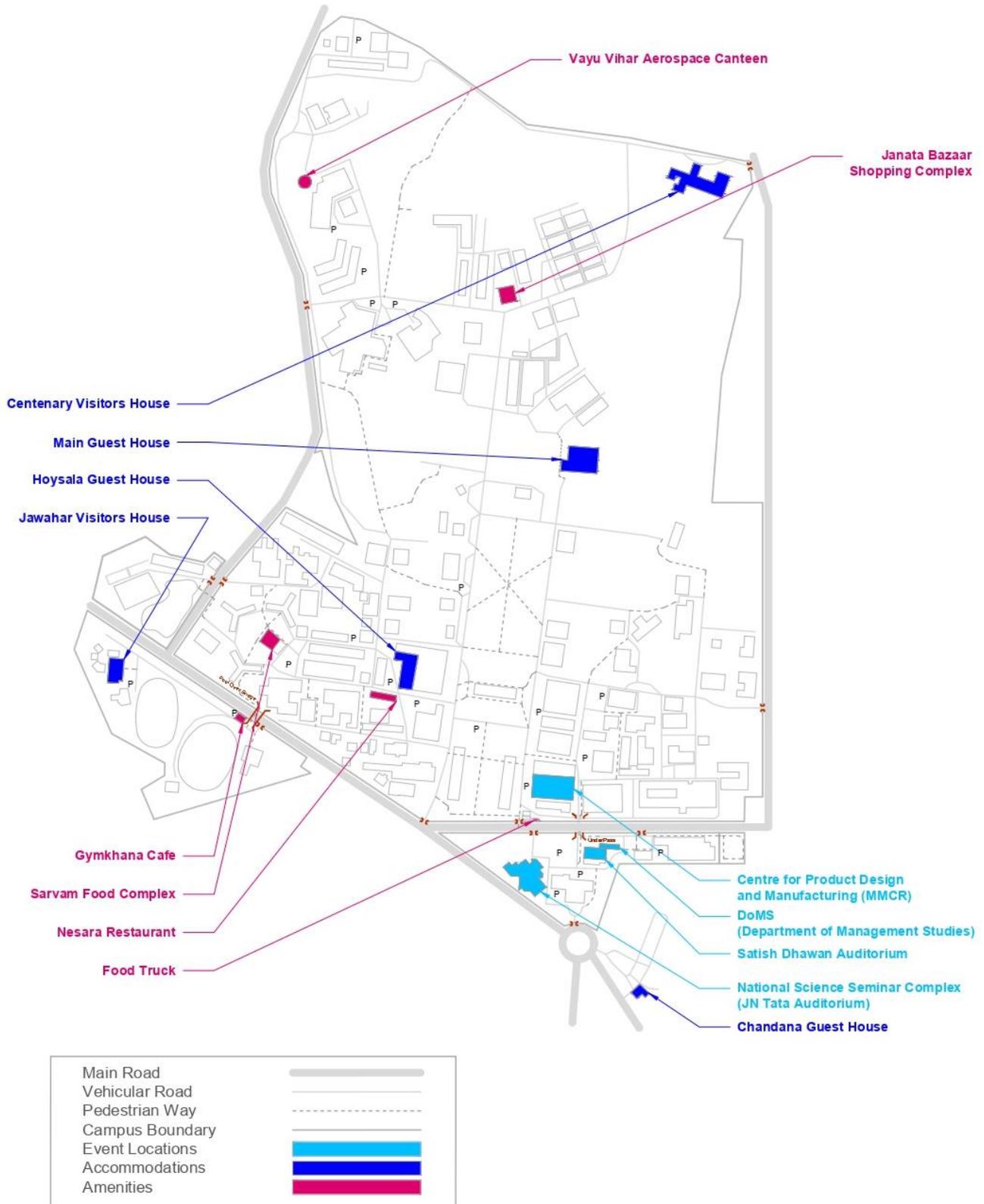
Vayu Vihar Aerospace Canteen



Gymkhana Café



IISc Map



Information about the Registration Process

Breakfast for all the participants and volunteers is arranged at JN Tata Lower Foyer area and will start from 7:30 AM. The registration process will remain open for all two days during the conference. The process will start at 8:00 AM. Every day the sessions will begin at 9:00 AM, so we request participants to arrive early to avoid congestion.

The participants who registered under Student category are required to carry a valid student ID card.

Upon completion of registration verification, each participant will receive the conference kit including I4AM'24 bag, Abstract booklet, Pen, ID badge, N95 mask and Sanitizers. Certificates will be given to the registered participants at the end of each day.

Information about Conference Dinner

On Day 1, 11th January 2024, the conference dinner is planned for the I4AM delegates and participants at Jawahar Lawn, Gymkhana, IISc. The buses will be arranged from JN Tata auditorium to Jawahar Lawn by the organisers. In addition, at the end of the event, drop to the guesthouse and nearby hotels will also be arranged from Jawahar Lawn.

Information about Wi-Fi Access

Name of Wi-Fi: iiscwlan

User ID: - **guest3.cpdm@iisc.ac.in**

Password: - **Guest3cpdm@6384**

Note: - No need to change the password and these accounts can be used by multiple users.

The procedure to connect to WIFI is given in the link below <https://digits.iisc.ac.in/set-wifi-connection/>

About Bangalore

Bangalore, the capital city of Karnataka is called the Garden City for its fascinating blossoms and luxuriant greenery that renders a unique beauty to this charming city. Bangalore, the fifth largest city in India, is also known as the Science city of India. The growth of the city has been phenomenal in recent years, largely due to unprecedented industrial progress with the establishment of many large, medium, and small-scale industries and technical and professional institutions of national importance.

Bangalore in January will be cool (15-20 deg C) and pleasant. Bangalore is well connected by road, rail and air to most major cities of the country. One can fly directly to Bangalore from several international airports as well. Visas are required for travel to India.

How to get there?

From the Airport

IISc is about 35 km from the Bengaluru International Airport named Kempegowda International Airport (BLR). You could hire either an Airport Taxi near the terminal exit or book an Uber/Ola cab. Cabs will typically charge around Rupees 700-1400 (depending on time, availability, and type of cab). A bus service operated by Bengaluru Metropolitan Transport Corporation (BMTC) runs from the airport to various areas in Bengaluru city. Service 'KIA – 10' will drop you to a bus stop near IISc. The institute is known as 'Tata Institute' to the locals and the bus stop to get down at while coming to IISc from the airport is thus called as 'Tata Institute Bus Stop'. The cost for the bus service is around Rupees 250. Additional information on the airport can be found at its official website **Bengaluru Airport** (<https://www.bengaluruairport.com/>), and more information regarding BMTC and route timings for KIA-10 can be found on its official website: **BMTC** (<https://mybmtc.karnataka.gov.in/english>).

From the Bangalore City Railway Station

Bangalore is connected to all major Indian cities by rail. The City Railway Station is the main terminal in Bangalore, which is about 7 km south of the IISc campus. You can exit the train station from platform number 1 or 8 (Back Gate) and board a prepaid taxi/auto rickshaw/Uber/Ola (costs around Rupees 150-200). Alternatively, walk to Kempegowda bus station (popularly called "Majestic") and take one of the many buses to IISc. Majestic bus station (7 km from IISc) is the central bus stand in Bengaluru and is just opposite the city railway station. Bus numbers from Bangalore City Bus Station are 273, 276, 99A, 99B, 272, 252.

From the Cantonment Railway Station

Cantonment Railway Station is another major railway station in Bangalore, popularly called Bangalore Cantt. It is also about 7km from IISc. The distance from this station to IISc is almost the same as the Bangalore City railway station, and it also has prepaid taxi and auto facility. Alternatively, walk to Vasantha Nagar Ambedkar Bhavan BMTC bus stop. Take the bus to "Tata Institute" – route numbers 94E, 252A, 270E, G-8, and K-1. IISc main gate is right next to the Tata Institute bus stop.

From the Yesvantpur Junction Railway Station (YPR)

The third major railway station in Bangalore, also the closest to IISc, is Yesvantpur. The station is less than 3 km from IISc. It has a prepaid stand. Booking an Uber/Ola is a more convenient option.

From any other part of Bangalore

You can hire a taxi or an auto from any part of the city. Auto fare between 10:00 p.m. and 06:00 a.m. will cost 50% more.

In and Around Bangalore

Vidhana Soudha: A magnificent building housing the state legislature and secretariat. It was conceived and executed by Kengal Hanumanthaya, the then Chief Minister, in 1956. It is built entirely of Bangalore granite in the Neo-Dravidian style.

Cubbon Park: This beautiful park, sprawling across 300 acres, was laid out by Lieutenant General Sir Mark Cubbon in 1864.

Lalbagh: Lalbagh was started by Hyder Ali in 1760 and later completed by Tipu Sultan. This 240-acre landscaped park is home to some very rare species of plants. The Glass House inspired by the Crystal Palace in London, is the venue of an annual flower show.

Bangalore Palace: Inspired by the Windsor Castle, this palace was built in the Tudor style by a Wodeyar king in 1887.

Bull Temple: One of the oldest temples in the city, built by Kempe Gowda, the founder of Bangalore. The temple is dedicated to Nandi, the sacred bull.

Things to do

Golf: Golf can be played in India in a variety of surroundings. The Golf Club in Bangalore, established in 1876, is a great golfing venue with the well-maintained greens. You can enjoy your favourite sport at - Karnataka Golf Association and - Eagleton Golf resort, the golf resort at the Bangalore-Mysore highway, one of the best options for a full day Golf Tour.

Eating out: Garden restaurants, drive-in eating joints, restaurants with attached pubs and bars, fast food joints and typical South Indian thali meals in the local style are available all over Bangalore.

Pubs & Night Life: Pub-crawling is a past time in vogue with the younger set. The beer here is among the best in the world, locally brewed, fresh and bubbly. The food here is snacky, tandoor kind.

Ayurveda: Ayurveda is a combination of two words; Ayur and Veda. Ayur means Life and Veda means knowledge, so it means Science of Life. It is five thousand years wisdom distilled into a system of practice. Ayurveda is much more than the well being of the body. Ayurveda defines health as “purity” of the body, mind and soul. The city has various Ayurvedic Centres where one can go and simply relax.

Shopping: Shopping is delightful experience in Bangalore. You will find some of the exquisite silks here. You can also take-home handicrafts in Sandalwood and rosewood, available in state-owned emporia & private stores. For gold & jewellery you can visit the quaint Jeweller's street.

Excursions

Mysore (139 Kms): Lush green Mysore, picturesquely located 750 m above sea level. All roads in Mysore lead to the Maharajah's Palace. The palace built in Indo-Saracenic style is profusely decorated and gilded.

Shravanabelagola (150 Kms): Wedged between two stark rocky hills, this legendary pilgrim center and shrine of the Janis since early times. The monolithic statue of Lord Gomteshwara, a Jain saint and an object of worship for centuries, standing atop one of the hills, is 18 meters high and is said to be one of the tallest and most graceful monolithic statues in the world.

Belur (222 Kms): Belur is known as the Dakshina Varanasi or Southern Benaras. The serenity of Belur is attributed to the celebrated temple of Channakeshava, built by the Hoysala king Vishnuvardhana in 1117 A.D. to commemorate his conversion from Jainism to Vaishnavism.

Halebid (239 Kms): This place was known as Dwara Samudra, the wealthy capital of the Hoysalas. Halebid has several strikingly beautiful Hoysala temples and Jain shrines. The Hoysaleshwara temple, standing on platform like a casket, is a sculptural extravaganza, richly endowed with most finely detailed scroll in stone.

Somnathpur (137 Kms): The little village of Somnathpur where you can see the famous 13 Century temple well known for its great architectural beauty.

Bannerghatta (21 Kms): Numerous wild animals roam freely in this densely forested hilly area-an ideal picnic spot for wildlife lovers.

Nrityagram Dance Village (30 Kms): India's only village for classical dances.

Nandi Hills (60 Kms): This hill station is a paradise located 4,850 feet above sea level. There is a fairly extensive plateau with gardens, lawns, tourist bungalows and hotels with wind surfing facilities.

Muthyala Paduvu-Pearl Valley (45Kms): A beautiful picnic spot. A waterfall gushes down 90 meters in a cascade of pearly drops. The Shiva temple located nearby is worth a visit.

I4AM'24: Feedback Form

