FIRST ANNOUNCEMENT

International Symposium on
“Advanced Materials for Industrial and Societal Applications”
13th November, 2019

57th National Metallurgists' Day
(Under the Aegis of Ministry of Steel, Government of India)
14th November, 2019

&

73rd Annual Technical Meeting
15-16th November, 2019

Organised by
IIM Trivandrum Chapter

In association with
IIM Kalpakkam Chapter
IIM Chennai Chapter
IIM Trichy Chapter
IIM Coimbatore Chapter

Venue: Hotel Samudra, Kerala Tourism Development Corporation (KTDC) &
Hotel Uday Samudra, Kovalam, Thiruvananthapuram
It is great honor for the IIM Trivandrum Chapter in association with Kalpakkam, Chennai, Trichy and Coimbatore Chapters of The Indian Institute of Metals to organize the 57th National Metallurgists' Day (NMD) and the 73rd Annual Technical Meeting (ATM) at Thiruvananthapuram, Kerala from November 13th to 16th, 2019. NMD-ATM is an annual mega event of the IIM where metallurgists and materials scientists/engineers from all over world, across the Industry-Academia & Research spectrum, participate to share their knowledge and findings. The Annual Technical Meeting to be held during November 15–16th will include four broad areas (Ferrous, Non-ferrous, Metal Science and Environmental) and their sub-disciplines, spanning principles & methods, processing, manufacturing and applications. In addition, contemporary topics like Industry 4.0 will be deliberated with invited and contributory lectures, posters and metallographic display.

An International Symposium on “Advanced Materials for Industrial and Societal Applications” will be held on November 13th, 2019 with Plenary and Keynote lectures and a Panel Discussion by eminent professionals.

We, the Organizing Committee, cordially invite you to join us in Thiruvananthapuram for a learning, sharing and networking experience, in this beautiful land of God's Own Country.

About the Indian Institute of Metals

The idea of formation of the Indian Institute of Metals (IIM) was conceived as early as in 1945. However, the Institute started its operations since 1946, and subsequently got registered in 1947. Since then, the Institute has seen phenomenal growth. Its activities include the whole gamut of Technology & Science applications in the areas of mineral beneficiation, extraction, fabrication, heat treatment, finishing of all ferrous and non-ferrous metals and alloys, ceramics, composites and other emerging materials. The activities of the Institute also encompass organization of national and international technical conferences and programs, conducting qualifying examinations, publications, etc. Starting with a modest membership of 42, the membership now stands at more than 10,000 drawn from various fields of metallurgical activities across 58 chapters. The Institute has grown into a prominent professional body and is now recognized throughout the world as one of the premier metallurgical organizations.

International Symposium on “Advanced Materials for Industrial and Societal Applications”

The international symposium will bring together experts from industry, R & D and academia to share their knowledge and experience, and projections for the future in the subject area. The day-long deliberations will have sessions relevant to the theme of the symposium. Some of the best-known experts in titanium, aluminum, composites, manufacturing, characterization, additive manufacturing, biomaterials, ceramics and composites, environmentally friendly materials, materials genome etc. from abroad and India will be delivering the Keynote and Invited lectures. A Panel Discussion with leaders from Industry, R & D labs and Academia is planned to be part of the symposium. Articles from the invited speakers will be published separately by Springer under IIM Book Series.

About NMD ATM

The National Metallurgists’ Day Awards Scheme was instituted in 1962 by the Ministry of Steel & Mines, Government of India. NMD is held every year on November 14th, commemorating the birthday of legendary figure of Late Pandit Jawaharlal Nehru, our first prime minister and the architect of Modern India. Leading professionals are honored on this day for their outstanding contributions in metallurgical fields including operation, research, design, education, waste management, energy conservation and corporate leadership. The Annual Technical Meeting is a mega calendar event of the Institute where leading practitioners and researchers across the entire metallurgy discipline, from India and abroad, participate and share their experiences. The first Annual Technical Meeting of the institute was held in Kolkata in 1947, followed by the National Metallurgists Awards Ceremony in Bhiwai in 1963.
Annual Technical Meeting (ATM)

The Annual Technical Meeting (ATM 2019) framework will balance the needs of young professionals from academia-research-industry- by (a) providing a knowledge sharing platform on technological advances, (b) discussing industry needs, constraints and relevant solutions, and (c) inspiring the professionals and students through career opportunities, technology trends and industry needs. The ATM 2019 will be structured around following six broad themes, which would appropriately leverage invited &keynote lectures, contributory papers, poster presentations and panel discussions to make this Technical Meeting highly engaging. Abstracts are invited on any of the following topics. ATM 2019 will consist of invited lectures from NMD Award winners and leading experts in the field of metallurgical and materials engineering. All details and other updates will be made available through NMD-ATM website: https://www.iimnmdatm2019.org

- Advances in Ferrous Metallurgy
- Advances in Non-Ferrous Metallurgy
- Advances in Materials Science and Engineering
- Energy, Environment and Safety
- Testing and Characterisation of Materials
- Advanced Materials Processing and Manufacturing Techniques

Prospective participants are requested to visit the website (https://www.iimnmdatm2019.org), for latest updates.

Call for Abstracts

Authors are requested to submit abstracts latest by 31st July 2019. The Abstract, not exceeding 300 words and prepared as per the guidelines, should be submitted only through online at www.iimnmdatm2019.org. The abstract sent directly through an e-mail will not be accepted. The abstract should be prepared using template provided on our website.

Metallography Contest

Registered delegates, who wish to participate in the Metallography Contest, may submit entries for one of the following categories:

a) Light Microscopy
b) Scanning Electron Microscopy
c) Transmission Electron Microscopy
d) Scanning Probe Microscopy

The contestants must carefully choose and specify the category of the entry, which will be unique and final. No reclassification will be done by the contestant or the judges afterwards. The micrographs may be in colour or in black & white. Winners for the best metallographs will be decided on the basis of technical content, aesthetics (visual aspect) and expertise of the techniques. Detailed instructions for preparation of the entries can be found on the conference website.

Technical Exhibition

A technical exhibition is planned during November 14 to 16th, 2019, in which various organizations, equipment suppliers, research institutions, consulting organizations and industries, both from India as well as from abroad, will get an opportunity to display their state-of-the-art products and technologies to the largest gathering of Metallurgical and Material Engineering community.

- Standard exhibition stall will be 8sq.m in area and will be provided 1 table, 2 chairs, 3 spot-lights, 5 amp plugpoint and name fascia to identify the exhibitor and it will be available at the rate of-
- Rs. 1,50,000 (or USD 8,000) per unit which is exclusive of 18% GST. There will be maximum 40 technical exhibition stalls that will be given by first cum first serve basis. For more details please visit the conference website.
Delegates are requested to register and pay online. Alternatively, they may fill the registration form and post it to the contact address given in the last page of the brochure. Registration fees can be paid either by electronic fund transfer or through Demand Draft in favour of “IIM NMD-ATM 2019” payable at Thiruvananthapuram.

**PAYMENT DETAILS**

A/C Number: 38329955594  
Bank Name: SBI Industrial Estate Pappanamcode Branch  
Account Name: IIM NMD-ATM 2019  
Account Type: Current  
IFSC Code: SBIN0070030  
MICR Code: 695002943  
Swift Code: SBININBBT08  
Permanent Account Number (PAN) of Indian Institute of Metals: AAATT3359D  
GSTIN: 32AAATT3359D1ZR

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<th>Registration Fees (Exclusive of 18% GST)</th>
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<tr>
<td><strong>Category</strong></td>
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<tr>
<td>IIM Non-Member</td>
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<td>IIM Member</td>
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<tr>
<td>IIM Member (Retired from service)</td>
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<tr>
<td>Student Delegates</td>
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<td>Exhibitor Delegates</td>
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<td>Accompanying Person</td>
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**Souvenir**

During NMD ATM 2019, a Souvenir will be released by the Chief Guest on 14th November 2019. The Souvenir would display messages from Govt. and Eminent Professionals, Special Articles, NMD and ATM event details, details about various Committees, Awards, Sponsors/Supporters and Advertisements from various industries, Organizations from India and abroad.

The souvenir would be provided to all the delegates attending the event and distributed to Govt. agencies, Industries, R&D labs and Academic Institutions.

**Souvenir Advertisements Tariff as applicable**

<table>
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<th>Position</th>
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<tr>
<td>Outside Back cover page Colour</td>
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<tr>
<td>Inside Cover Page Colour</td>
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<tr>
<td>Full Page Colour</td>
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Sponsorship

Sponsorships are solicited from Government organizations, Public Sector enterprises, Private Industries, Commercial establishments and Research Laboratories, who wish to sponsor various events/functions during the NMD-ATM celebrations. Different categories of sponsorship rates and complimentary benefits are listed below (All the fees are exclusive of 18% GST).

**Platinum Sponsor (Rs. 10,00,000 or USD 50,000)**
- Full page colour advertisement in the souvenir
- One page sponsor profile in the souvenir
- Complimentary registration of up to 8 delegates for the event
- Recognition as a platinum sponsor on conference website and all printed documents and marketing literature for the event with corporate logo of the sponsor on the banner

**Diamond Sponsor (Rs. 7,50,000 or USD 35,000)**
- Full page colour advertisement in the souvenir
- Complimentary registration of up to 6 delegates for the event
- Recognition as a diamond sponsor on conference website and all printed documents and marketing literature for the event with corporate logo of the sponsor on the banner

**Gold Sponsor (Rs. 5,00,000 or USD 25,000)**
- Full page colour advertisement in the souvenir
- Complimentary registration of up to 4 delegates for the event
- Recognition as a gold sponsor on conference website and all printed documents and marketing literature for the event with corporate logo of the sponsor on the banner

**Silver Sponsor (Rs. 3,00,000 or USD 15,000)**
- Full page colour advertisement in the souvenir
- Complimentary registration of up to 3 delegates for the event
- Recognition as a silver sponsor on conference website and all printed documents and marketing literature for the event with corporate logo of the sponsor on the banner

**Conference Banquet (Rs. 10,00,000 or USD 50,000)**
- Corporate logo of the sponsor on the event banners
- Full page colour advertisement in the souvenir
- Complimentary registration of up to 8 delegates for the event
- Complimentary dinner invitations up to 5 delegates for the event
- Welcome speech by the sponsor during the conference banquet
- Recognition as a conference banquet sponsor on conference website and all printed documents and marketing literature for the event with corporate logo of the sponsor on the banner

**Conference Lunch (Rs. 6,00,000 or USD 30,000)**
- Full page colour advertisement in the souvenir
- Complimentary registration of up to 5 delegates for the event
- Complimentary lunch invitations up to 5 delegates for the event
- Welcome speech by the sponsor during the conference banquet
- Recognition as a conference banquet sponsor on conference website and all printed documents and marketing literature for the event with corporate logo of the sponsor on the banner

**Session Sponsorship (Rs. 3,00,000 or USD 15,000)**
- Full page colour advertisement in the souvenir
- Complimentary registration of up to 3 delegates for the event
- Welcome signage for the particular session will carry the logo of the sponsor

**Cultural Program (Rs. 10,00,000 or USD 50,000)**
- Full page colour advertisement in the souvenir
- Corporate logo of the sponsor on the banner with recognition as program sponsor
- Complimentary registration of up to 5 delegates for the event
- Complimentary invitation to cultural program followed by dinner for up to 5 persons from the sponsor.
- Welcome speech by the sponsor during the function
- Recognition as a cultural program sponsor on all printed documents and marketing literature for the event with corporate logo of the sponsor on the banner.
Accommodation

Trivandrum has wide range of hotels from luxurious to budget levels and one can directly book the same. The organizers have earmarked fixed number of rooms at both the Hotels where event is held. These rooms will be made available on first come first serve basis. In addition, some rooms are available at Guest House of ISRO and CSIR labs. All full time students and research scholars, who are members of IIM, will be provided with free accommodation at VSSC Hostel, on first come first serve basis. Bonafide letter from the Head of the Institution/Guide is necessary to avail this facility. Transport for all those who stay at those places, where organizers have booked rooms, will be arranged during the days of the event. Details regarding the accommodation will be uploaded in the NMD website in due course.

Committees for NMD-ATM 2019

PATRONS

Anil Agarwal, Chairman, Vedanta Resources Ltd.
Anil Kumar Chowdhury, Chairman, SAIL
Bajendra Kumar N., CMO, NMDC Ltd., Hyderabad
Chandrasekharan N., Chairman, Tata Group
Debu Bhattacharya, Vice Chairman, Hindalco
Kumar Mangalam Birla, Chairman, Aditya Birla Group
Madhavan R., CMO, HAL, Bangalore
Narendran T.V., Global CEO and MD, Tata Steel
Naveen Jindal, CMO, Jindal Steel & Power Ltd.
Ratan Jindal, CMO, Jindal Stainless Ltd.
Rath P.K., CMO, RINL, Visakhapatnam

Chairman : Shri Anand Sen, President, TQM & Tata Steel Ltd., Jamshedpur
Co-Chairman : Dr. U.Kamachi Mudali, Chairman and CE, HWB, DAE, Mumbai
Convener : Shri Kushal Saha, Secretary General, IIM HQ, Kolkata

NATIONAL STEERING COMMITTEE

Chairman : Shri Anand Sen, President, TQM & Tata Steel Ltd., Jamshedpur
Co-Chairman : Dr. U.Kamachi Mudali, Chairman and CE, HWB, DAE, Mumbai
Convener : Shri Kushal Saha, Secretary General, IIM HQ, Kolkata

Abhijit Pati, CEO, Vedanta Aluminium Ltd.
Abhyuday Jindal, MD, Jindal Stainless Steel Ltd.
Amit Kalyani, Executive Director, Bharat Forge Ltd.
A. Natarajan, VP & CFO, TCS
Arun Kumar Rath, CEO, Bhilai Steel Plant
Arun Ramchandani, Executive VP, L&T Defence
Ashwini Kumar, CEO, Rourkela Steel Plant
Balaji C.D., Director, ADA
Bharadwaj A., CEO & Founder M&M Consulting
Dastur R.M., Chairman, M&M Dastur Co
Dilip C. Oommen, MD & Dy. CEO, Essar Steel
Dinesh Keskar, Sr. Vice President, Asia Pacific and India, Boeing
D. Pramod Jindal, Director,ujące
D. Muraleedharan, Chairman, CCIR
Pratypush Kumar, President, Boeing India
Dr. Samir V. Kamat, Director General, DRDO
Dr. Shaharabudhe A.D., Chairman, AICTE
Dr. Surappa M.K., Vice Chancellor, Anna University, Chennai
Dr. Vinit Nowal, Dy, Managing Director & CEO, JSW Steel Ltd.

Guenter Butsche, MD, Tata Motors Ltd.
Jayapal P., Chief Executive, CEMILAC
Jehangir A., Group CEO & Director Supervisory, Forbes Marshall
Kashiva D., Executive Director, Sponge Iron Mfrs. Association
Maitreeeolkar, CMD, Sanjeev Auto
Mohanty S.S., Vice Chairman, Neelachal Ispat Nigam Ltd.
Nabajit K.K., Indian Stainless Steel Development Authority
ParthaSengupta, CEO, SNRL, Indian Power Corporation Ltd.
Pawan Goenka, MD, Mahindra & Mahindra

NATIONAL STEERING COMMITTEE

Dr. Banerjee D. (2010-11)
Dr. Chattopadhyay K. (2013-14)
Dr. Narayana Rao M. (2011-12)

Dr. Sanak K Mishra (2009-10)
Mohanty S.S. (2015-16)
Nerurkar H.M. (2012-13)
Parbat R.N. (1995-96)
Pugazhenthy L. (2008-09)

Dr. Babu. N Kalyani, CMD, Bharat Forge Ltd.
Dr. Satheesh Reddy G., Scientific Adviser to Raksha Mantri & Chairman, DRDO
Dr. Shekhar C. Mande, Director General, CSIR
Dr. Sivan K., Chairman, ISRO/ Secretary DoS
Dr. Tapan Kumar Chand, CMD, NALCO
Ved Prakash, CMD, Metals & Minerals Trading Corp Ltd.
Vishambhar Saran, Chairman and CEO, VISA Steel Ltd.
Vyas K.N., Chairman, Atomic Energy Commission
### NATIONAL ORGANISING COMMITTEE

<table>
<thead>
<tr>
<th>Position</th>
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<tbody>
<tr>
<td>Chairman</td>
<td>Dr. U. Kamachi Mudali, Vice President, IIM &amp; Chairman &amp; CEO, HBW, DAE, Mumbai</td>
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<tr>
<td>Co-Chairman</td>
<td>Dr. Anil Gokhale, Vice President, IIM &amp; Professor, IITB Mumbai</td>
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<tr>
<td>Co-Chairman</td>
<td>Dr. S. Somanath, Director, VSSC, Thiruvananthapuram</td>
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<tr>
<td>Convener</td>
<td>Dr. P. V. Venkitakrishnan, Director, CBPO, ISRO HQ, Bangalore</td>
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<tr>
<td>Co-Convener</td>
<td>Dr. P. Ramesh Narayanan, Group Head, MCTG, VSSC, Thiruvananthapuram</td>
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### CORE ORGANISING COMMITTEE

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<tr>
<td>Chairman</td>
<td>Dr. P. V. Venkitakrishnan, Director, CBPO, ISRO HQ</td>
</tr>
<tr>
<td>Co-Chairman</td>
<td>Dr. S. C. Sharma, Dy Director, PCM, VSSC</td>
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<tr>
<td>Chairman ATM 2019 Committee</td>
<td>Dr. S. V. S. Narayana Murty, VSSC, Thiruvananthapuram</td>
</tr>
<tr>
<td>Chairman Int'l Symposium Committee</td>
<td>Dr. Divakar Ramachandran, IGCAR, Kalpakkam</td>
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<td>Chairman Poster Session Committee</td>
<td>Dr. Raman Sankaranarayanan, NIT Trichy</td>
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<td>Chairman Metallography Contest Committee</td>
<td>Dr. Bakshi Srinivas Rao, IIT Madras</td>
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<tr>
<td>Chairman Resource Mobilization &amp; Finance Committee</td>
<td>Shri. K. Thomas Tharian, LPSH, Thiruvananthapuram</td>
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<tr>
<td>Chairman Registration Committee</td>
<td>Dr. U. T. S. Pillai, CSIR-NIIST (Retired), Thiruvananthapuram</td>
</tr>
<tr>
<td>Chairman Exhibition and Cultural Committee</td>
<td>Shri. M. Arumugam, LPSH, Thiruvananthapuram</td>
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<tr>
<td>Chairman Hall Arrangement Committee</td>
<td>Shri. Abhay Kumar Jha, VSSC, Thiruvananthapuram</td>
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<tr>
<td>Chairman Catering Committee</td>
<td>Dr. Bhoje Gowd E., CSIR-NIIST, Thiruvananthapuram</td>
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<tr>
<td>Chairman Accommodation and Transport Committee</td>
<td>Shri. P. Ramakumar, VSSC, Thiruvananthapuram</td>
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<tr>
<td>Chairman Website and Communications Committee</td>
<td>Dr. U. S. Harreesh, CSIR-NIIST, Thiruvananthapuram</td>
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<tr>
<td>Chairperson's Programme Committee</td>
<td>Dr. S. Savithri, CSIR-NIIST, Thiruvananthapuram</td>
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</tbody>
</table>

### Convener

**NMD-ATM 2019**
- **Dr. P. Ramesh Narayanan**
  - Group Head
  - Material Characterisation and Testing Group
  - MMG/MME
  - Vikram Sarabhai Space Centre, ISRO P.O.,
  - Thiruvananthapuram 695022, Kerala, India.
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  - Fax: 0091-471-2705048
  - Mobile: 0 94461 46741
  - Email: convener@iimnmdatm2019.org

### Chairman

**ATM 2019**
- **Dr. S. V. S. Narayana Murty**
  - Head
  - Material Characterisation Division
  - MCTG/MMG/MME
  - Vikram Sarabhai Space Centre, ISRO P.O.,
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  - Mobile: 0 94461 03037
  - Email: technical@iimnmdatm2019.org

### Treasurer

**NMD-ATM 2019**
- **Dr. A. Srinivasan**
  - Senior Scientist
  - CSIR-NIIST
  - Industrial Estate Post
  - Thiruvananthapuram
  - Phone: 0091-471-2515248
  - Fax: 0091-471-2549712
  - Mobile: 09746473876
  - Email: treasurer@iimnmdatm2019.org

### Website
- [https://www.iimnmdatm2019.org](https://www.iimnmdatm2019.org)
Imagine lying down in bed at night knowing fully well that just outside your door, an untamed world has just awakened. There’s something about wildlife that’s a lot more than just seeing or hearing them. The feelings and emotions evoked when sharing a home with some of the rarest animal species on this planet including the Bengal Tiger, Lion-Tailed Macaque, Indian Bison and Nilgiri Tahr is an experience worth a lifetime. Come be a part of the wild.

About Kerala

Beaches

Stretch yourself, take in a deep breath of the fresh sea air, feel your feet sink into the beach sand and saunter down the edge of the shoreline watching all your ‘real world’ worries ebb away with the waves. The beaches in Kerala are a heady concoction of fun and serenity. What better way to celebrate vacations than on the best beaches of God’s Own Country?

Hills

God’s Own Country holds close to its bosom many a treasure, one of them being its hill stations. Nobody really knows what it is about these lush velvet green hills that work its magic on each visitor. But everybody knows that the embrace of the breeze, the rustle of the leaves and the cold nip in the air here all ignite passions, dreams and life like nowhere else on Earth. Cuddle into the lap of Nature and discover Bliss.

Backwaters

Once upon a time the canals, lakes and lagoons in Kerala decided to create one of the most beautiful wonders of the world — The Great Backwaters. A journey through these emerald green waterways will take you to places you could never imagine existed. Step aboard a boat, float along on liquid tranquility or simply laze along the banks of these backwaters and feel your heart be imbued with peace!

Wildlife

Imagine lying down in bed at night knowing fully well that just outside your door, an untamed world has just awakened. There’s something about wildlife that’s a lot more than just seeing or hearing them. The feelings and emotions evoked when sharing a home with some of the rarest animal species on this planet including the Bengal Tiger, Lion-Tailed Macaque, Indian Bison and Nilgiri Tahr is an experience worth a lifetime. Come be a part of the wild.

About Thiruvananthapuram

Located at the south-western tip of Indian subcontinent, Thiruvananthapuram, which is also known as Trivandrum is a calm, beautiful and quiet city. It is the capital of Kerala (God’s own country), which has a long coast line full of coconut trees and is much-sought-after tourist destination. The major attractions in Trivandrum are lakes, beaches, palaces, temples, museum and zoo. The world famous Kovalam beach and Sri Padmanabha Swamy Temple are in Trivandrum. Another major tourist spot, Kanyakumari, is about 95 km south of Trivandrum. Padmanabhapuram Palace (55km) and Suchindram Temple (73 km) are on the way to Kanyakumari. Another important tourist spot north of Thiruvananthapuram is Varkala beach (50 km).

It has excellent public transport system, taxis and auto-rickshaws for travel. Airport is about 10 km away. The climate in the month of November is pleasant with a maximum temperature of 31°C and a minimum of 23°C. Trivandrum is well connected by air, rail and road with other parts of the country. Air India, Indigo, Spice jet and Jet airways operate daily flights to New Delhi, Hyderabad, Cochin, Mumbai, Bangalore and Chennai. Hotel accommodation is available in plenty suiting to all tariff ranges. Details of hotels in the city are available in the website www.keralatourism.org of Kerala Tourism Development Corporation.