

06 - 08 September, 2025 IIT Tirupati, India







### Welcome to ICFP 2025

#### Dear Delegate,

On behalf of organizing committee, and the host institution 'Indian Institute of Technology Tirupati (IITT)', we welcome you to ICFP 2025. This is the second time this prestigious international conference is going to be organized in India, and we aim to ensure an excellent experience to you. We are expecting to host more than 250 delegates, with more than 50 international delegates. Besides plenary talks, the conference will have 2 parallel sessions, a poster session and a session dedicated to discussing the challenging issues in friction-based processes that will keep young researchers attracted to this field for next two decades. In the spirit of previous ICFP conferences, there will be ample time for the talk, discussions following a talk during and after the session. To encourage the students and young researchers, we plan to select up to 6 posters for various awards.

Tirupati is considered one of the holiest Hindu pilgrimage sites because of Tirumala Venkateswara Temple. Other famous ancient temples in the city include Padmavathi Temple at Tiruchanur, Govindaraja Swamy Temple, and Kapileswara Temple at Kapila Theertham etc. We have planned a tour of nearby places of interest and inspiration, providing opportunities for continued discussions with the aim of initiating, nurturing, and promoting collaborations within the professional community, while also facilitating socialization. The organizing committee is also planning to arrange Sri Venkateswara Swamy Tirumala Temple Darshan for all attendees after the conference.

We are aware of the diversity of the delegates, and we have considered it while planning for food, sightseeing, accommodation, etc. We will also organize cultural programs filled with classical dances and music of India. We will also prepare an engaging plan for the accompanying person.

At both the Institute and the Department levels, we are excited about hosting you in Tirupati for the 4<sup>th</sup> ICFP 2025. The beginning of September is a particularly pleasant time in Tirupati, with comfortable temperatures. Against the backdrop of beautiful weather, we eagerly look forward to your physical presence and participation in this significant scholarly event. We look forward to welcoming you! Sincerely,

#### Organizing Committee Members ICFP 2025

**Prof. Satyam Suwas,** IISc Bangalore, India (Chairman, 4<sup>th</sup> ICFP Conference)

**Prof. Ajay Kumar,** IIT Tirupati, India (Convener, 4<sup>th</sup> ICFP Conference)

Prof. Devinder Yadav, IIT Patna, India (Convener, 4<sup>th</sup> ICFP Conference)

Prof. Anbukkarasi Rajendran, IIT Dharwad, India (Convener, 4th ICFP Conference)

## **Important Timelines**

Submission of Abstracts 31<sup>st</sup> March 2025 30<sup>th</sup> June 2025 Early Bird Registration

Abstract Acceptance Intimation 15<sup>th</sup> May 2025 31<sup>st</sup> July 2025 Regular Registration

## Highlights

Fundamentals of Friction-Based Processes

Informal Discussions and Social Engagements

Processing-Microstructure-Property Correlation

Students Awards

Plenary Talks, Invited Contributions, Poster presentations, Flash Talks for Students **Industrial Application and Challenges** 



## **Topics**

#### Fundamentals of Friction-Based Processing

Solid - State Manufacturing Techniques

Friction-Based Metal Forming Processes

Friction Stir Welding and Allied Processes

Friction Stir Processes

Friction - Based Additive Manufacturing

Smart Manufacturing, AI/ML and Digital Twin Tools

#### Industrial Application and Challenges

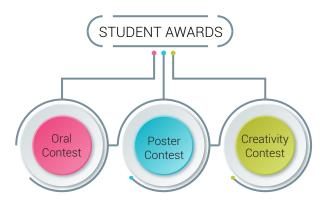
Aerospace and Defence

**Automotives** 

**Naval and Nuclear** 

#### Instructions

- O The number of the contribution is restricted to one presentation for one submitting author
- Submitted abstract will be reviewed by experts before acceptance/rejection
- Submitted abstract will be distributed to the participants in the conference
- Although we, organizing committee, will try our best, your presentation type and category may be changed due to the limited capacity of the conference rooms
- O Abstracts sent by email will NOT be accepted
- Abstracts submitted after the final due date will NOT be accepted



Industry Specific Focus Aligned with National Mission









#### Processing-Microstructure-Property Correlation

**Deformation Mechanisms** 

**Advanced Characterization of Deformation Processes** 

Mechanical Behaviour at Micro and Nano Scale

Fracture and Fatigue

**High Temperature Deformation** 

Wear and Surface Engineering

Mechanistic Foundations for Multiscale Modelling

#### Call for Abstracts

Prospective contributors are requested to submit abstract of their paper online through the Conference website about 250 words latest by 31st March 2025. On acceptance, contributors of the selected papers would be required to submit manuscript of the extended abstract (up to 4 pages) latest by 30st April 2025. The guidelines for authors and the template for the extended abstract is available for downloading from the website. ICFP -2025 will endeavor to give preference to papers which deal with novel advancements, applications and developments in the aforesaid areas. All papers submitted for presentation in the conference must be original and should not have been presented, published, or under consideration for publication / presentation. All papers will be subjected to review by a Technical Committee.

#### **Publication**

International Journal of Material Forming

Springer Publication: SCI, Scopus

**Materials Characterization** 

Elsevier Publications: SCI, Scopus

Journal of Materials Engineering and Performance

Springer & ASM Publication: SCI, Scopus

**Journal of Manufacturing Processes** 

Elsevier Publications: SCI, Scopus

**Welding International** 

Taylor and Francis Publication: Scopus

Springer Proceedings

Scopus

Publishing Partner



Collaboration Partners







## **Eminent Speakers (Alphabetical Order)**



Prof. Achilles Vairis
University of West Attica, Greece
Editor In Chief in "Welding International"



Prof. Adrian Gerlich University in Waterloo Canada



Prof. Bharat Gwalani North Carolina State University, USA



**Dr. Kumar Kandasamy** Enabled Engineering, Virginia United States



**Prof. Nilesh Kumar** The University of Alabama, USA



**Prof. Qingyu Shi** Tsinghua University, Beijing, China



**Prof. Rajiv Mishra** Univ. of North Texas, USA



Prof. Satish V. Kailas IISc Bangalore, India



**Prof. Sudarsanam S Babu** The Univ. of Tennessee, USA



## Committees

## **Conference Patron**





## **Conference Conveners** -



Prof. Ajay Kumar IIT Tirupati, India



Prof. Devinder Yadav IIT Patna, India



Prof. Anbukkarasi Rajendran IIT Dharwad, India

## International Advisory Committee

Prof. Tony Schmitz	University of Tennessee, USA
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## **Local Organising Committee**

Prof. Ajay Kumar	IIT Tirupati, India		
Prof. Devinder Yadav	IIT Patna, India		
Prof. Anbukkarasi Rajendran	IIT Dharwad, India		
Prof. Nitish Raja	IIT Patna, India		
Prof. Mohan M. Garlapati	IIT Patna, India		



## Registration

#### **Registration Fee**

		Upto 30 June'25 (Early Bird) (Must for Presenters)	Upto 31 July'25 (Regular)	Late Registration
Indian (INR)	Research Scholars / Students	₹8,000	₹ 9,000	₹10,000
	Delegates (Academic - Faculty, PDF & Public Sector R&D)	₹12,000	₹14,000	₹16,000
	Delegates (Non Academic - Industry)	₹ 15,000	₹17,500	₹ 20,000
	Spouse/Accompanying	₹ 6,000	₹ 7,500	₹9,000
Foreign (USD)	Research Scholars / Students	\$ 400	\$ 500	\$ 600
	Delegates (Academic - Faculty, PDF & Public Sector R&D)	\$ 500	\$ 600	\$ 700
	Delegates (Non Academic - Industry)	\$ 700	\$ 800	\$ 900
	Spouse/Accompanying	\$ 300	\$ 400	\$ 500

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N:B:

Students are required to attach student declaration form signed by the Department Head during online registration.



A registration confirmation letter will be sent to you via e-mail on receipt of the payment. Registration fees excludes 18% GST.



## Sponsorship and Exhibition

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## Few important sightseeing options in and around city

**Sri Venkateswara Temple, Tirumala**: Sri Venkateshwara Temple is the most revered and celebrated temple of Tirupati having tourists and pilgrims flooding in all year long. This is one of the holiest and the wealthiest temples in the world and millions of devotee's flock here to pay their reverence.



**Sri Padmavathi Ammavari Temple**: At a little distance from the main city area, one finds the Sri Padmavathi Ammavari Temple dedicated to Goddess Padmavathi. One of the many sacred structures of Tirupati, this one is home to many legends and stories about the Goddess.



**Sri Govindarajaswami Temple**: Sri Govindarajaswami Temple is a 12<sup>th</sup> century Hindu Vaishnavite shrine built by Saint Ramanujacharya and is one of the biggest temple complexes in the district. The presiding deity is Lord Vishnu, also called Govindarajaswami. The beautiful traditional Dravidian architecture and its rich culture attract tourists in quite a large number every year.



**Sri Kalahasti Temple**: It is situated along the banks of the River Swarnamukhi, an important river in South India and a tributary of the River Pennar. The three ancient epics, the Skanda Purana, Shiva Purana, and Linga Purana, mention the historic Shiva temple at Srikalahasti.



Kanipakam Temple: Kanipakam is home to a popular Hindu temple of Lord Ganesha. It was constructed in the early 11<sup>th</sup> century by the Chola Emperor Kulottunga and was expanded further in 1336. It is situated at 75 kms from Tirupati city on Chittoor-Irala road.



**Kapila Theertham:** It is located 4 Kms from Tirupati. It is a fascinating waterfall at the base of the Seshadri Hills. It is the main temple of Lord Shiva in Tirupati in which the Shiva Lingam is made of metal.



**Gudimallam Temple**: It is an ancient linga in the Parasurameswara Swamy Temple of Gudimallam, a small village near Tirupati city in the Yerpedu mandal of the Tirupati district of Andhra Pradesh, India. It is situated about 13 kms from Tirupati city.



**Thondamanadu Temple**: One of the famous temple of Sri Venkateswara svayambhu is Thondamanaadu Sridevi Bhudevi sametha Sri Venkateswara swamy temple. It is a small village 28kms from Tirupati.



**Appalayagunta Temple**: The Prasanna Venkateswara Swamy temple is located at a distance of about 16kms, from Tirupati. This temple has its uniqueness with the presence of the presiding deity of Lord Sri Prasanna Venkateswara Swamy in 'Abhaya Hasta Posture', which is considered the ultimate blessing posture.



How To Reach

- O By Air: Nearest airports are Tirupati Airport (14 km from city) and Chennai Airport (145 kms).
- O By Rail: Connected via Tirupati Railway Station (TPTY) and Renigunta Junction (RU).
- O **By Road**: Buses from major cities: Chénnai (134 km), Vijayawada (412 km), Visakhápatnam (755 km), Bangalore (248 km), Hyderabad (556 km).

## Conference Venue

#### Indian Institute of Technology Tirupati

Yerpedu – Venkatagiri Road, Yerpedu Post, Tirupati District, Andhra Pradesh, India – 517619



#### Contact us

#### Conference Organizer



IIT Tirupati, India icfp@iapmfp.org | 91 11 46066077 www.iapmfp.org/icfp

#### Conference Manager



Connextions Orbis Pvt. Ltd 243, Somdutt Chamber II, Bhikaji Cama Place New Delhi - 110066 icfp@iapmfp.org | 99294 49193