

2025 IRCOBI ASIA CONFERENCE, IIT MADRAS		
TTJ Auditorium, IC&SR, IITM		
Day 1, 25 June 2025		
9:00	Registration	
	Session [W1] Workshop on Experimental and Computational Injury Biomechanics	
	Chair(s) : Mats Svensson, Chalmers, SE & Peter Cripton, UBC, CA	
	10:00	Mats Svensson, Chalmers, SE [WT1] Introduction and Overview
	10:15	Francisco José López Valdés, Comillas, ES [WT2] Understanding the role of Post-mortem Human Subject testing in Injury Biomechanics
	10:45	Claire F. Jones, Univ. Adelaide, AU [WT3] Injury biomechanics investigations using body-component models
11:15	Coffee Break and Networking	
11:30	Johan Davidsson, Chalmers, SE	[WT4] Experiments with Volunteers
12:00	Peter Cripton, UBC, CA	[WT5] Human Imaging Studies in Injury Biomechanics
12:30	[P01] Panel	
13:15	Lunch & Networking Session	
14:30	Mats Svensson, Chalmers, SE	[WT6] Experiments with Animal Surrogates
15:00	Nils Lubbe, Autoliv, SE	[WT7] From experimental data to injury risk functions
15:30	Coffee Break and Networking	
15:45	Christoph Leo, TU Graz, AT	[WT8] Simulation-Based Safety Assessment: Virtual Testing focusing on Vulnerable Road Users
16:15	Aditya Belwadi, Tesla, US	[WT9] Human Body Simulations in OEMs
16:45	[P02] Panel	
18:00	Social Program (18.00 CLT), Registration (19.30-20.30), Welcome Dinner (19.30 onwards)	
Day 2, 26 June 2025		
6:00	IITM Campus Nature Walk (Optional)	
8:00	Registration	
8:50	Conference Opening and Introductory Remarks	
	Nils Lubbe, IRCOBI Council Member & Qing Zhou, Chair of the Asia Committee of IRCOBI Council	
	Session [S1] Experimental Injury Biomechanics	
	Chair: Claire F. Jones, Univ. Adelaide, AU	
	9:00	Khyati Verma, NITK, IN [IRC-A-25-10] Histopathological assessment of lung tissue under impact
	9:10	Claire F. Jones, Univ. Adelaide, AU [IRC-A-25-11] The local force-displacement impact response of the cranium is dependent on cranial region and the presence of the scalp
	9:20	Ankit Malik, IITD, IN [IRC-A-25-12] Subject-Specific and Strain-Rate-Dependent Material Modeling of Human Femurs for Dynamic Loading
	9:30	Tesfaye O. Terefe, IITD, IN [IRC-A-25-13] Characterisation of Low-velocity Penetrating Shrapnel-induced Injuries in Skin Tissue
	9:40	Ryan D. Quarrington, Univ. Adelaide, AU [IRC-A-25-14] Does a head-forward posture produce neck dislocation during inverted drop experiments?
	9:50	Discussion
10:00	Inauguration	
10:30	Networking Session, Coffee Break & Poster Session	
	Session [K1] Keynote Address	
	Chair: Francisco José López Valdés, Comillas, ES	
	11:30	Mats Svensson, Chalmers, Sweden [KT1] Whiplash Injury Research at Chalmers – A review and visions for the future
	Session [S2] Human Body Simulations	

	Chair: Christoph Leo, TU Graz, AT	
12:05	Qiang Wang, Hunan University, Changsha, China	[IRC-A-25-15] Kinematic and Kinetic Analysis of the Lumbar and Pelvis of Highly Reclined Occupants Under Varied Rigid Seat Configurations Using a Human Body Model
12:15	Qing Zhou, Tsinghua Univ., CN	[IRC-A-25-16] Comparison of kinematic response between MADYMO Human Body Model and PMHS in reclined posture
12:25	Kasi Sajun Prasad, RNTBCI, IN	[IRC-A-25-17] Chest Response to Steering Wheel Lower Rim Impact: Comparative Analysis of THOR-50M and GHBM Models
12:35	Kommanaboyina Venu, RNTBCI, IN	[IRC-A-25-18] Improving Shoulder Injury Index of WorldSID Dummy using CAE Parametric Studies in 32 km/h Oblique Pole
12:45	Pradeep Kulavi, Humanetics, IN	[IRC-A-25-19] Frontal Loading Parametric Sensitivity Analysis on the 50th Percentile Male HBM Connect
12:55	Discussion	
13:05	Lunch & Networking Session	
	Session [T1] Sports Biomechanics and Injury	
	Chair: Peter Crompton, UBC, CA	
14:00	Rajinikumar Palaniyappan, TPESU, IN	[IT1] Decoding the Science of Injury Biomechanics in Sports
14:15	Gregory Tiermey, Ulster University, UK	[IT2] Head Exposure to Acceleration Database in Sport (HEADSport)
14:30	Sanjeev Gupta, Gurugram University, IN	[IT3] When Springs Fail: Decoding Biomechanical Injuries in Runners through Strike Pattern Dysfunction & sEMG Insights
14:45	Karthick Balaji, Zoriox Innovation Labs, Chennai, IN	[IT4] Biomechanics in Facial Fractures: Patterns and Causes in Road Traffic Accidents
15:00	Discussion	
15:15	Coffee Break & Networking	
	Session [S3] Design of Safety Systems [Session Sponsor: SBL]	
	Chair: Johan Davidsson, Chalmers, SE	
15:45	Prathamesh Mahesh Dehadrav, Volvo, IN	[IRC-A-25-20] Simulation-driven design optimisation of instrument panel to improve upper leg injury of occupant in truck collision
15:55	Shashank Gowda, Autoliv, IN	[IRC-A-25-21] Evaluation of a One Size Fits All Motorcycle Airbag Concept using Finite Element Human Body Models
16:05	P M Shedolkar & B G Bijju, Tata Motors, IN	[IRC-A-25-22] Vehicle structural crash robustness evaluation though Machine Learning approach
16:15	Qing Zhou, Tsinghua Univ., CN	[IRC-A-25-23] Effectiveness of Active Restraint System Activated in Emergency Braking on Occupant's Whiplash Injury in Subsequent Rear-end Collision
16:25	Nagarajan S, DRDO, IN	[IT5] Computational approach for realisation of rehabilitative exoskeletons to prevent musculoskeletal injuries
16:40	Suren Mohanty, BETA CAE, IN	[ST1] Behavior of Variant Human Body models on different restraint systems
16:50	Discussion	
17:45	Buses leave for Social Program + Conference Banquet	
Day 3, 27 June 2025		
8:30	Registration	
	Session [S4] Computational Biomechanics	
	Chair: Qing Zhou, Tsinghua Univ., CN	
9:00	Qing Zhou, Tsinghua Univ., CN	[IT6] Influence of walking on knee ligament injuries in car-to-pedestrian collisions
9:15	Sushil Kumar, IITD, IN	[IRC-A-25-24] The influence of personalization of the Finite Element Head model in predicting TBI
9:25	Ryan D. Quarrington, Univ. Adelaide, AU	[IRC-A-25-25] The effect of head-forward posture on risk of lower neck dislocation during head-first impacts: A computational investigation
9:35	Ashutosh Khanna, VIT Bhopal, IN	[IRC-A-25-26] Biomechanical Evaluation of Lumbar Intervertebral Discs Using Novel Intervertebral Artificial Disc : A Finite Element Analysis Study
9:45	Febin Chris Asir J A, VIT Chennai, IN	[IRC-A-25-27] Effectiveness of a standalone cage in a cervical spine – A finite element study
9:55	Swathy Gopal N, IITG, IN	[IRC-A-25-28] Biomechanical Assessment of Shoulder Implants: A Comparative Study Using FE Analysis
10:05	Subin P George, IITM, IN	[IRC-A-25-29] Sensitivity analysis of a morphological finite element L3-L4 FSU for biomechanical responses
10:15	Kushagra Kumar, VIT Chennai, IN	[IRC-A-25-30] Sensitivity Study of Upper Spine Ligaments for a Head and Neck Finite Element Model
10:25	Discussion	
10:40	Coffee Break & Poster Session	

	Session [K2] Dinesh Mohan Memorial Lecture	
	Chair: Mats Svensson, Chalmers, SE	
11:00	Anoop Chawla, IITD, IN	[KT2] Need for Crash Research in India, and our experiences on the Delhi Jaipur Highway
	Session [S5] Accident Data Analysis [Session Sponsor: Volvo]	
	Chair: Nils Lubbe, Autoliv, SE	
11:35	Venkatesh Balasubramanian, IIT Madras, IN	[IT7] The Indian journey to data-driven Road Safety
11:50	Aditya Belwadi, Tesla, US	[IT8] Crash Data Analysis with Tesla Database
12:05	Guorong Li, Autoliv, SE	[IRC-A-25-31] Road Traffic Accident-Related Traumatic Brain Injuries in China: Influence of Seatbelt, Helmet Use and Crash Configuration Among Different Road Users
12:15	Junaid Shaikh, Autoliv, IN	[IRC-A-25-32] Traumatic Brain Injuries for Different Road Users and Restraint Use: An Overview Using Indian In-Depth Crash Data
12:25	Aarti Ranmal, Autoliv, IN	[IRC-A-25-33] Rider Injuries in Sport Utility Vehicle to Powered Two-Wheeler Crashes in India
12:35	Chandrashekhar A, Tata Motors, IN	[IRC-A-25-34] An Accident Statistics driven adoption framework for ADAS in India
12:45	Discussion	
13:00	Lunch & Networking Session	
	Session [S5] Continued ..	
	Chair: Girikumar Kumaresh, Bosch, IN	
14:00	Sivakumar, Autoliv & Sohanjeet, Volvo, IN	[IT9] Vision Zero Approach & SITIS : Activities in India as part of Accident Research / Connected Safe Transport Ecosystem
14:15	Santhosh Kumar G, Tata Motors, IN	[IRC-A-25-35] Characteristics of Passenger Car Accidents in India
14:25	Junaid Shaikh, Autoliv, IN	[IRC-A-25-36] Single-Vehicle Powered Two-Wheeler Crashes in India: Guidance for Test Method Development
14:35	K M Pranesh Rao, RNTBCI, IN	[IRC-A-25-37] Factors influencing Traffic Accidents in Countries with Fast-growing Economy
14:45	Discussion	
	Session [T2] New Car Assessment Program [Session Sponsor: VIT Chennai]	
	Chair: Rahul S Mahajan, ARAI, IN	
	Moderator: Girikumar Kumaresh, Bosch, IN	
	Christoph Leo, TU Graz, AT	[IT10] Euro NCAP Roadmap – What's New in 2026?
15:00	Rahul S Mahajan, ARAI, IN	[IT11] BNCAP – Overview, Status and Future
15:30	[P03] Panel: Rahul S Mahajan, ARAI, IN; Anoop Chawla, IITD, IN; Anil Kumar Chigulapalli, Tata Motors, IN; Christoph Leo, TU Graz, AT; Girikumar Kumaresh, Bosch, IN	
16:15	Conference Valedictory	
16:30	High Tea	
17:00	Resresearch Park / Lab / IITM Heritage Center Visits (Optional)	
		Time Guideline
	Regsitration/ Networking / Poster / Refreshment / Socials	
	Panel discussions	45 min
	Workshop sessions	25 min + Discussion at end of session
	Keynote talks	25 min + Discussion at end of session
	Invited talks	13 min + Discussion at end of session
	Sponsor talks	8 min + Discussion at end of session
	Contributed paper presentations	8 min + Discussion at end of session
Venue		

Registration		ICSR Corridor (in front of the TTJ Auditorium)
All technical sessions		ICSR Main Auditorium
Exhibition / Stalls		Exhibition Hall
Poster presentation		Exhibition Hall
All Refreshments / Lunch / Dinner (25th June 2025)		Refreshments : Exhibition Hall ; Lunch : ICSR Main Dining Hall
Social program on 25th June 2025		Central Lecture Theater (CLT)
Social program and Banquet Dinner on 26th June 2025		Coral Beach Resort, Mahabalipuram