

2025 IRCOBI ASIA CONFERENCE, IIT MADRAS		
Tentative Schedule		
Day 1, 25 June 2025		
09:30	Registration	
Session [W1] Workshop on Experimental and Computational Injury Biomechanics		
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] Body-region/Component-level Biomechanical Testing
11:15	Break	
11:30	Peter Crompton, UBC, CA	[WT4] Imaging Studies of Humans
12:00	Johan Davidsson, Chalmers, SE	[WT5] Experiments with Volunteers
12:30	[P01] Panel	
13:15	Lunch	
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	Break	
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	
17:30	Research Park Visit / Lab Visits -> Social Program -> Welcome Dinner	
Day 2, 26 June 2025		
08:00	Lab visits	
09:00	Registration	
09:30	Inauguration & Introductory Remarks	
Session [S1] Experimental Injury Biomechanics		
10:00	Khyati Verma, NITK, IN	[792] Histopathological assessment of lung tissue under impact
10:10	Claire F. Jones, Univ. Adelaide, AU	[796] The local force-displacement impact response of the cranium is dependent on cranial region and the presence of the scalp
10:20	Ankit Malik, IITD, IN	[798] Subject-Specific and Strain-Rate-Dependent Material Modeling of Human Femurs for Dynamic Loading
10:30	Tesfaye O. Terefe, IITD, IN	[800] Characterisation of Low-velocity Penetrating Shrapnel-induced Injuries in Skin Tissue
10:40	Ryan D. Quarrington, Univ. Adelaide, AU	[808] Does a head-forward posture produce neck dislocation during inverted drop experiments?
10:50	Discussion	
11:00	Break & Poster Session	
Session [K1] Keynote		
11:30	Mats Svensson, Chalmers, Sweden	[KT1] Whiplash Injury Research at Chalmers – A review and visions for the future
Session [S2] Human Body Simulations		
12:05		[802] 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	Kasi Sajun Prasad, RNTBCI, IN	[804] Chest Response to Steering Wheel Lower Rim Impact: Comparative Analysis of THOR-50M and GHBM Models
12:25	Kommanaboyina Venu, RNTBCI, IN	[812] Improving Shoulder Injury Index of WorldSID Dummy using CAE Parametric Studies in 32 km/h Oblique Pole
12:35	Pradeep Kulavi, Humanetics, IN	[817] Frontal Loading Parametric Sensitivity Analysis on the 50th Percentile Male HBM Connect
12:45	Discussion	
13:00	Lunch & Networking Session	
Session [T1] Sports Biomechanics and Injury		
14:00	Rajinikumar Palaniyappan, TPESU, IN	[IT1] Decoding the Science of Injury Biomechanics in Sports
14:15	Gregory Tierney, 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	Break & Poster Session	
Session [S3] Design of Safety Systems [Session Sponsor: SBL]		
15:45	Prathamesh Mahesh Dehadray, Volvo, IN	[698] Simulation-driven design optimisation of instrument panel to improve upper leg injury of occupant in truck collision
15:55	Shashank Gowda, Autoliv, IN	[785] Evaluation of a One Size Fits All Motorcycle Airbag Concept using Finite Element Human Body Models
16:05	Nagarajan S, DEBEL, IN	[IT5] Computational approach for realisation of rehabilitative exoskeletons to prevent musculoskeletal injuries
16:20	P M Shedolkar & B G Bijju, Tata Motors, IN	[786] Vehicle structural crash robustness evaluation through Machine Learning approach

16:30	Qing Zhou, Tsinghua Univ., CN	[807] Effectiveness of Active Restraint System Activated in Emergency Braking on Occupant's Whiplash Injury in Subsequent Rear-end Collision
16:40	Discussion	
Session [T2] Sponsors Talk		
16:50	Suren Mohanty, BETA CAE, IN	[ST1] Behavior of Variant Human Body models on different restraint systems
17:10	Social Program -> Conference Banquet	
Day 3, 27 June 2025		
08:30	Registration	
Session [S4] Computational Biomechanics		
09:00	Qing Zhou, Tsinghua Univ., CN	[IT6] Influence of walking on knee ligament injuries in car-to-pedestrian collisions
09:15	Sushil Kumar, IITD, IN	[793] The influence of personalization of the Finite Element Head model in predicting TBI
09:25	Ryan D. Quarrington, Univ. Adelaide, AU	[809] The effect of head-forward posture on risk of lower neck dislocation during head-first impacts: A computational investigation
09:35	Ashutosh Khanna, VIT Bhopal, IN	[813] Biomechanical Evaluation of Lumbar Intervertebral Discs Using Novel Intervertebral Artificial Disc : A Finite Element Analysis Study
09:45	Febin Chris Asir J A, VIT Chennai, IN	[814] Effectiveness of a standalone cage in a cervical spine – A finite element study
09:55	Swathy Gopal N, IITG, IN	[815] Biomechanical Assessment of Shoulder Implants: A Comparative Study Using FE Analysis
10:05	Subin P George, IITM, IN	[819] Sensitivity analysis of a morphological finite element L3-L4 FSU for biomechanical responses
10:15	Kushagra Kumar, VIT Chennai, IN	[821] Sensitivity Study of Upper Spine Ligaments for a Head and Neck Finite Element Model
10:25	Discussion	
10:40	Break and Poster Session	
Session [K2] Dinesh Mohan Memory Lecture		
11:00	Anoop Chawla, IITD, IN	[KT2] TBA*
Session [S5] Accident Data Analysis [Session Sponsor: Volvo]		
11:35	Venkatesh Balasubramanian, IIT Madras, IN	[IT7] TBA*
11:50	Aditya Belwadi, Tesla, US	[IT8] TBA*
12:05	Guorong Li, Autoliv, SE	[726] 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	[787] Traumatic Brain Injuries for Different Road Users and Restraint Use: An Overview Using Indian In-Depth Crash Data
12:25	Aarti Ranmal, Autoliv, IN	[791] Rider Injuries in Sport Utility Vehicle to Powered Two-Wheeler Crashes in India
12:35	Chandrashekhar A, Tata Motors, IN	[794] An Accident Statistics driven adoption framework for ADAS in India
12:45	Discussion	
13:00	Lunch and Networking Session	
Session [S5] Continued ..		
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	[795] Characteristics of Passenger Car Accidents in India
14:25	Mohan Jayathirtha, Autoliv, IN	[797] Single-Vehicle Powered Two-Wheeler Crashes in India: Guidance for Test Method Development
14:35	Kulothungan Vimalathithan, RNTBCI, IN	[810] Factors influencing Traffic Accidents in Countries with Fast-growing Economy
14:45	Discussion	
Session [T3] New Car Assesment Program [Session Sponsor: VIT Chennai]		
15:00	Christoph Leo, TU Graz, AT	[IT10] Euro NCAP
	Rahul S Mahajan, ARAI, IN	[IT11] Bharat NCAP 2.0
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	

TBA* To be announced

Registration/ Networking / Poster / Refreshment / Socials

Panel discussions

Workshop sessions

Keynote talks

Invited talks

Sponsor talks

Contributed paper presentations