

The 42nd National Conference on Fluid Mechanics and Fluid Power, December 14-16, 2015, NITK, Surathkal
Technical Program

13th December (Sunday)							
DATE	TIME	VENUE	Program Details				
13/12/15	18:00-20:00	ATB Foyer	Registration				
14th December (Monday)							
14/12/15	7:45-8:15	ATB Foyer	Break Fast				
14/12/15	8:15-9:15	ATB Foyer	Registration				
14/12/15	9:15-10:00	ATB seminar Hall	Inauguration Chief Guest: Dr. Jayawant Arakeri, IISc Bangalore				
14/12/15	10:00-10:30	ATB seminar Hall	Inaugural Lecture: Dr. Jayawant Arakeri, IISc Bangalore				
14/12/15	10:30-11:00	NTB Foyer	High Tea				
14/12/15	11:00-12:00	ATB seminar Hall	Subir kar Plenary Leture: Dr. Rama Govindarajan, TIFR Centre for Interdisciplinary Studies, Hyderabad				
14/12/2015	12:00 - 13:15	NTB*(New Teaching Block) L101	Session 1: Fundamental Issues and Perspectives (A1 = 69, 103, 104, 135)	Anirban Guha, IIT Kanpur	12:00-12:15		Thematic SessionTalk: Anirban Guha, IIT Kanpur
					69	Naveen Sharma, Andallib Tariq and Manish Mishra	DETAILED HEAT TRANSFER AND FRICTION FACTOR CHARACTERISTICS IN A RECTANGULAR DUCT WITH RIB TURBULATORS
					103	Deepak Khurana, Aditya Kumar and Sudhakar Subudhi	EXPERIMENTAL INVESTIGATION OF FORCED CONVECTION HEAT TRANSFER UNDER TURBULENT FLOW WITH WATER BASED Al ₂ O ₃ AND TiO ₂ NANOFLUIDS
					104	Sonal Maheshwari, Raunaq Hasib and Syed Fahad Anwar	PULSATILE FLOW PAST TWIN HEATED CIRCULAR CYLINDERS IN TANDEM ARRANGEMENT
					135	Sanjay Kumar Singh, Manish Mishra and P. K. Jha	EXPERIMENTAL RESPONSE TIME TO STEP CHANGE IN FLOW RATES ON TRIPLE CONCENTRIC-TUBE HEAT EXCHANGER
		NTB L102	Session 2: Instability, Transition and Turbulence (I = 27, 62, 236, 304)	Amitabh Bhattacharya, IIT Bombay	12:00-12:15		Thematic SessionTalk: Amitabh Bhattacharya, IIT Bombay
					27	Aravind S and Kannan Iyer	NUMERICAL STUDY OF TURBULENT FLOW OVER A SINGLE CYLINDER IN CROSS FLOW

				62	Aman Jain and Smita Mathad	SIMULATION BASED ANALYSIS ON PERFORMANCE CHARACTERISTICS OF A HYDROCYCLONE
				236	Amlan Garai, Subhadip Pal, Sudeepta Mondal, Swarnendu Sen and Achintya Mukhopadhyay	EXPERIMENTAL INVESTIGATION OF SPRAY CHARACTERISTICS OF KEROSENE AND ETHANOL BLENDED KEROSENE USING A GAS TURBINE HYBRID ATOMIZER
				304	Jeevananthan K and K. Arul Prakash	NUMERICAL INVESTIGATION OF FLUID FLOW AND HEAT TRANSFER STUDIES ON 2D AND 3D RECTANGULAR CYLINDERS
	NTB L202	Session 3: Granular Flows (L3 = 14, 58, 79, 132)	Manaswita Bose, IIT Bombay	12:00-12:15		Thematic SessionTalk: Manaswita Bose, IIT Bombay
				14	Saurabh Gupta, Nairit Pal and Pabitra Halder	NATURAL CONVECTION COOLING IN A SQUARE CAVITY FILLED WITH NANOFUID USING TWO PHASE APPROACH
				58	Ananth Pai S, Pavan Kumar V and Shaligram Tiwari	EFFECT OF EXTERNAL PULSATION ON KINEMATICS OF FLUID PARTICLE IN THE FIELD OF LAMB-OSEEN VORTEX PAIR
				79	Saikat Datta, Arup Kumar Das and Prasanta Kumar Das	NUMERICAL INVESTIGATION OF DROPLET UP-CLIMBING BY ELECTRO WETTING
				132	Sreekant Damodara and Ashis Kumar Sen	FABRICATION OF A PDMS MICROLENS FOR AIR BUBBLE MANIPULATION IN A MICRO-CHANNEL
13:15-14:15	NTB Foyer	Lunch				
14:15 - 15:30	NTBL101	Session 4: Flow Measurement Techniques & Instrumentation (B2 = 229, 213, 235, 321, 211)	Atul Shrivastava, IIT Bombay	14:15-14:30		Thematic Session Talk: Atul Shrivastava, IIT Bombay
				229	Jayaram Thumbe, Ravikiran Kadoli and Gangadharan K V	EXPERIMENTAL STUDIES ON THE EFFECT OF STAND-OFF DISTANCE ON THE PRESSURE RISE INSIDE A POLYESTER FILTER BAG DURING PULSE JET OPERATION
				213	Arjumand Rasool and Adnan Qayoum	EFFECT OF DIFFERENT RIB SHAPES ON HEAT TRANSFER AND PRESSURE DROP FOR A FLOW THROUGH A TWO-PASS SQUARE CHANNEL
				235	Rajesh T. N, T. J. Sarvoththamma Jothi and T. Jayachandran	COLD FLOW INVESTIGATION OF FLOW BEHAVIOUR IN A VORTEX COMBUSTION COLD WALL CHAMBER
				321	Pranit Himanshu Rana, Dr. T.J.S. Jothi and L.G. Kiran Kumar	SCALAR CONCENTRATION CHARACTERISTICS OF A FREE JET
				211	Atulkumar Soti and Rajneesh Bhardwaj	HEAT TRANSFER ENHANCEMENT STUDY OF A FLEXIBLE PLATE IN PULSATING CHANNEL FLOW
	NTB L102	Session 5: Multiphase Flow (J1 = 38, 39, 43, 44)	Ratnesh Shukla, IISc Bangalore	14:15-14:30		Thematic Session Talk: Ratnesh Shukla, IISc Bangalore
				38	Jishnu H, Jayakumar J. S. and Ebin P. S.	CFD MODELING OF SATURATED FLOW BOILING IN HEATED CHANNELS
				39	Arun K. Raj and Jayakumar J. S.	EFFECT OF TURBULENCE ON CONDENSATION OVER VERTICAL SURFACES

				43	S R Vishnu Narayan and Jayakumar J. S.	HEAT TRANSFER ANALYSIS OF VERTICAL-UPWARD TUBES IN SUPERCRITICAL BOILERS WITH CIRCUMFERENTIAL UNIFORM HEATING
				44	Jophins Joy and Jayakumar J S	MODELLING OF FLASHING AND TWO-PHASE DISPERSION OF LIQUID JETS
	NTB L202	Session 6: CFD Development: Fundamentals & Algorithms (C1 = 20, 23, 24, 28, 33)	Amaresh Dalal, IIT Guwahati	14:15-14:30		Thematic Session Talk: Amaresh Dalal, IIT Guwahati
				20	Pramita Bit, Debajit Saha and Snehamoy Majumder	NUMERICAL ANALYSIS OF THREE DIMENSIONAL LAMINAR FLUID FLOW AND HEAT TRANSFER THROUGH A SQUARE DUCT WITH TWIN BAFFLES
				23	Debajit Saha and Snehamoy Majumder	ROTATING TURBULENT JET FLOW WITH MASS INJECTION
				24	Mohit Chaturvedi, Shyam N. Shukla and Ravindra S. Birajdar	NUMERICAL VALIDATION OF NPSHR OF CENTRIFUGAL PUMP
				28	Krishna Chandran and Krishnamurthy Muralidhar	STUDY OF ACCELERATORS FOR MATRIX EQUATIONS IN CFD
				33	Athul Sathyanath, Eswaran M, M.R. Ramesh and G.R. Reddy	NUMERICAL STUDY ON TUNED LIQUID DAMPER FOR MITIGATION OF STRUCTURAL RESPONSE
15:30-16:00	NTB Foyer	Tea				
16:00-16:45	ATB Seminar Hall	Invited Lecture: Dr Arun K Saha, Dept. of Mechanical Engineering, IIT Kanpur				
16:45 - 18:15	NTBL101	Session 7: Fluid Machinery (G1 = 9, 19, 37, 41, 81)	Anish. S, NITK	9	Sarath R. S., Ajithkumar R, Sijin D. and. Srikrishnan A.R	CFD ANALYSIS TO INVESTIGATE THE EFFECT OF TIP SQUEALER IN A LINEAR TURBINE CASCADE
				19	Avinash Kumar R, Shobhavathy M. T. and R Ajith Kumar	FLOW BEHAVIOUR OF TRANSONIC AXIAL COMPRESSOR STAGE WITH DIFFERENT TURBULENCE MODELS
				37	A. Dhanasekaran and S. Kumaraswamy	VARIABLE FREQUENCY OPERATION OF SUBMERSIBLE PUMPS
				41	Ivin Ignatious and Jayakumar J. S.	NUMERICAL STUDY OF IMPINGEMENT/EFFUSION COOLING OVER THE ANNULAR BURNER LINER OF GAS TURBINE COMBUSTOR
				81	Ragesh R. Nair, Mahadev J. Prabhu and R. Ajith Kumar	VORTEXING DURING DRAINING FROM CYLINDRICAL TANKS: EFFECT OF DRAIN PORT ECCENTRICITY
	NTB L102	Session 8: CFD Analysis using COMERCIAL Software (D1 = 7, 18, 83, 117, 118)	Manaswita Bose, IIT Bombay	7	Vinay C. A., Kumar G. N. and S.Bhaskar Chakravarthy	CFD ANALYSIS AND EXPERIMENTAL STUDY OF TURBOPROP ENGINE AIR INTAKE FOR STATIC TEST CONDITION
				18	R. C. Mehta, S. R. Vijithra and J. Vincima	NUMERICAL SIMULATION OF HIGH SPEED FLOW OVER RUSSIAN REENTRY CAPSULES AND DOUBLE CONE CONFIGURATION
				83	Basavaraja T. and Dr. R P Reddy	CFD INVESTIGATIONS ON THERMAL AND HYDRAULIC PERFORMANCE OF THE PLATE HEAT EXCHANGERS
				117	Karthik K, Vengadesan S and Bhattacharyya S. K.	PREDICTION OF SOUND GENERATED FROM FLOW PAST SQUARE CYLINDER
				118	Jeyakumar S and Kirubakaran K	EFFECT OF THREE DIMESIONAL CAVITIES IN AXISYMMETRIC SUPERSONIC FLOW

					14:15-14:30		Thematic Session Talk: Ratnesh Shukla, IISc Bangalore
					45	Sreevatsan Ramesh and Jayakumar .J .S.	SIMULATION OF TWO PHASE FLOW DURING CRYOGENIC CHILLDOWN PROCESS
					61	Basanta Kumar Rana, Arup Kumar Das and Prasanta Kumar Das	NUMERICAL INVESTIGATION OF A TAYLOR BUBBLE COLLAPSE AT FREE SURFACE IN THE VERTICAL CHANNEL
					111	Ravindra Chaudhari and Krishna Kumar	FLOW BOILING HEAT TRANSFER IN SINGLE MINICHANNEL FOR VERTICAL TUBE
			Session 9: Multiphase Flow (J2 = 45, 61, 111, 113, 119, 129)	Ratnesh Shukla, IISc Bangalore	113	Upasna Sethi and Krishna Kumar	ANALYTICAL AND EXPERIMENTAL INVESTIGATIONS OF FLOW REGIME TRANSITION AND PRESSURE DROP IN NON BOILING TWO PHASE FLOW FOR HORIZONTAL PIPE
					119	Reshmi R. Nair, Pedda Peeraiah C, Chaitra V.P, Jayachandran T and Jayakumar J. S	SIMULATION OF FLASH VAPORIZATION IN NOZZLES USING 5-EQUATION COMPRESSIBLE MULTI-FLUID MODELS
					129	Swapnil Patil, Anil Kumar Sharma, Velusamy K, Basant Kumar Nashine and Selvaraj P	EFFECT OF SQUARE SHAPED PROTRUSION ON CONJUGATE LAMINAR NATURAL CONVECTION AND SURFACE RADIATION
14-12-15	19:30-20:30	NTB Foyer	Dinner				
15th December (Tuesday)							
DATE	TIME	VENUE	Program Details				
15-12-15	7:45-8:30	NTB Foyer	Breakfast				
15-12-2015	8:30-9:30	ATB Seminar Hall	Aswatha Narayana Lecture: Dr. Jaywant Arakeri, Dept. of Mechanical Engineering, IISc Bangalore				
					9:30-9:45		Thematic Session Talk: Atul Shrivastava, IIT Bombay
15-12-2015	9:30 - 11:00	ATB Seminar Hall	Session 10: Flow Measurement Techniques & Instrumentation (B1 = 31, 40, 42, 63, 68, 182)	Atul Shrivastava, IIT Bombay	31	Abhishek Malik and Sushanta Dutta	EXPERIMENTAL STUDY OF A SYNTHETIC JET ON FLOW CONTROL OVER RECTANGULAR RIB MOUNTED ON A SURFACE
					40	Sovik Mukhopadhyay, Sudipta Mondal, Pranibesh Mandal, Rana Saha and Dipankar Sanyal	REAL –TIME VELOCITY CONTROL OF LABORATORY SCALE MODEL OF A RECIPROCATING RUN-OUT TABLE UNDER SPRAY COOLING

			42	K. Gangadharan Nair and Vijay V.S.	PREDICTION OF FAILURE OF JOURNAL BEARING DUE TO VARIATION OF FLUID PRESSURE WITH VARIOUS SAE GRADE OILS
			63	Sandeep N. Naik, S.Vengadesan and K. Arul Prakash	FLOW PAST ROTATING ELLIPTIC CYLINDER
			68	Dr.Prasanna Nambiar, Amol Shetty, Amogh Thatte, Shubham Lonkar, and Vishtasp Jokhi	HYDRAULIC RAM PUMP-MAXIMIZING EFFICIENCY
			182	Aswathy S. Raj, P. J. Deshpande, Ravi Dodamani, Pavan D.G, P.Chowdhury and Madhavan K.T.	EXPERIMENTAL INVESTIGATION ON PASSIVE PROTRUSIONS TO CONTROL LAMINAR SEPARATION BUBBLE OVER NACA 4415 AIRFOIL AT LOW Re
NTBL101	Session 11: Bio Fluid Mechanics (E = 75, 128, 174, 189, 190, 277)	Arun. M, NITK	75	Sahar Ahsaas and Shaligram Tiwari	NUMERICAL SIMULATION OF STEADY FLOW OF BLOOD IN A COMMON CAROTID ARTERY WITH SYMMETRIC STENOSIS
			128	Priyankar Shivhare, Abhiroop Bhadra, Anil Prabhakar and Ashis Kumar Sen	HYDRODYNAMIC FOCUSING OF PARTICLE LADEN FLOW FOR MICROFLOW CYTOMETRY
			174	Ashesh Chattopadhyay, Atul Thakur and Rishi Raj	SPLINE BASED MODELLING OF STATIC AND SLIDING DROPLETS WITH CONTACT ANGLE HYSTERESIS
			189	Dwaipayan Sarkar, Nishant Upadhyay, Somnath Roy and Subhas Chandra Rana	IMMERSED BOUNDARY SIMULATION OF CARDIOVASCULAR FLOW
			190	Abdulrajak Buradi, Arun Mahalingam and Jasjit S. Suri	NUMERICAL ANALYSIS OF THE EFFECT OF TURBULENCE TRANSITION ON THE HEMODYNAMIC PARAMETERS IN HUMAN CORONARY ARTERIES
			277	Namshad. T, Mukul Shrivastava, Amit Agrawal and Atul Sharma	EFFECT OF CHORDWISE FLEXIBILITY ON HYDRODYNAMIC PROPULSION OF A PITCHING HYDROFOIL
NTB L102	Session 12: Fluid Structure Interaction (F = 121, 234) and Session 16: Fluid Machinery (G2 = 82, 116, 134, 153)	Raghuraman N Govardhan, IISc Bangalore	9:30-9:45		Thematic Session Talk: Raghuraman N Govardhan, IISc Bangalore
			121	Kishore Singh Patel and Ratnesh K. Shukla	SIMULATION OF LIQUID BRIDGE DYNAMICS WITH A PHASE FIELD MODEL SIMULATION
			248	Aditya Annangi and Rajneesh Bhardwaj	A FLUID-STRUCTURE INTERACTION MODEL FOR BLAST LOADING OF SOFT STRUCTURES IN COMPRESSIBLE VISCOUS FLOWS
			254	Amitabh Bhattacharya and Shahajhan Sorathiya	POWER EXTRACTION FROM ANGULAR OSCILLATION OF ELLIPTIC CYLINDERS
			116	Taimoor Asim and Rakesh Mishra	NUMERICAL INVESTIGATIONS ON THE TRANSIENT PERFORMANCE OF A CENTRIFUGAL PUMP

				134	Nitesh Mondal, Niami Pada Mandal, Rana Saha, Saikat Mookherjee and Dipankar Sanyal	ANALYSIS OF A PRESSURE COMPENSATED VARIABLE DISPLACEMENT SWASH PLATE TYPE AXIAL PISTON PUMP WITH RATE PISTON PRESSURE FEEDBACK
				153	D. Majumdar, P. Badhuk, A. Dolai, P. Shit and R. Saha	DEVELOPMENT OF A MINIATURIZED FIXED DISPLACEMENT VANE PUMP
	NTB L202	Session 13: CFD Development: Fundamentals & Algorithms (C2 = 98, 109, 210, 36, 73, 166)	J. Banerjee, SVNIT Surat	98	Anuj Kumar Kansal, Dr. Naresh Kumar Maheshwari and Dr. P.K. Vijayan	VALIDATION OF CFD CODE AND EFFECT OF INLET AND OUTLET NOZZLE LOCATION ON MODERATOR TEMPERATURE DISTRIBUTION
				109	Parthasarathi Mishra and Alok Sharma	EFFECT OF PERIODIC FLOW PULSATION IN A MICROCHANNEL
				210	Atul Kumar Soti and Rajneesh Bhardwaj	CONVERGENCE ACCELERATION OF FIXED-POINT ITERATION IN FLUID-SOLID INTERACTION
				36	Mohan Labade, Vikas Kumar and Sri Sai Meher Krottapalli	FLOW SIMULATION STUDIES ON HPC PLATFORM WITH GPU ACCELERATOR
				73	Mithun Krishnan G and Harikrishnan G	HEAT TRANSFER AND PRESSURE DROP ANALYSIS OF LOTUS POROUS METALS
				166	Aayush Agrawal, Aditya Singh and Balaji Srinivasan	IMPROVEMENT IN UNDERSTANDING OF NUMERICAL INSTABILITIES IN COMPRESSIBLE FLOWS
11:00-11:30					Tea	
11:30-12:30	ATB Seminar Hall	Invited Lecture: Dr. Shuichi Torii , Dept. of Mechanical Systems Engineering, Kumamoto University, JAPAN				
12:00 - 13:15	NTBL101	Session 14: CFD Analysis using COMERCIAL Software (D2 = 120, 188, 202, 205)	Atul Sharma, IIT Bombay	120	Christopher Stephen and Kumaraswamy Sivasailam	VIBRO-ACOUSTIC DIAGNOSTICS ON RADIAL FLOW PUMP DURING CAVITATION TEST
				188	Md. Sujaat Ali, Manish Kumar Jaiswal, Manish Kumar and Somnath Roy	A COMPUTATIONAL STUDY OF FLOW OVER AN AIRFOIL AT LOW REYNOLDS NUMBER USING IMMERSED BOUNDARY METHOD
				202	R Deepakkumar and S Jayavel	NUMERICAL STUDY ON LAMINAR FLOW CHARACTERISTICS FOR FLOW PAST CROSS-CONFINED HYBRID ROWS OF TUBES
				205	Kiran Mohan, Anbu Saravanan S, Raghu Jarpala and Aravind Vaidyanathan,	EXPERIMENTAL AND CFD STUDY ON SHOCK STRUCTURE DEVELOPMENT IN PLANAR EXPANSION DEFLECTION NOZZLE
		NTB L102	Session 15: Micro & Nano Fluid Mechanics (H1 = 22, 65, 101, 103)	12:00-12:15	Thematic Session Talk: Amit Agarwal, IIT Bombay	
	22			Rajesh Choudhary, Adarsh Saini and Sudhakar Subudhi	EXPERIMENTAL INVESTIGATION OF NATURAL CONVECTION IN AN ENCLOSURE WITH WATER AND α -AL ₂ O ₃ /WATER NANOFLUID FOR DIFFERENT ASPECT RATIOS	
	65			Gaurav Katiyar, Shyamprasad Karagadde, Sandip Kumar Saha and Atul Sharma	NUMERICAL MODELING OF BUBBLE GROWTH IN A MICROCHANNEL USING LEVEL SET METHOD	

				101	Tapan Kumar Pradhan and Pradipta Kumar Panigrahi	EXPERIMENTAL INVESTIGATION OF FLUID CONVECTION INSIDE AN EVAPORATING DROPLET OF BINARY MIXTURE	
				103	Deepak Khurana, Aditya Kumar and Sudhakar Subudhi	EXPERIMENTAL INVESTIGATION OF FORCED CONVECTION HEAT TRANSFER UNDER TURBULENT FLOW WITH WATER BASED Al_2O_3 AND TiO_2 NANOFUIDS	
		Session 16: MHD and EHD Flows (L2 = 112, 165, 239, 248, 254)	G. Tomar, IISc Bangalore	112	Manoj Kumar Godugu and Arun Kumar Sridharan	EXPERIMENTAL INVESTIGATION OF CORROSION IN HEAT EXCHANGERS DUE TO SEA WATER ON BOARD SHIPS	
				165	Chamkor Singh, Arup Kumar Das and Prasanta Kumar Das	OSCILLATORY MOVEMENT OF A FERROFLUID DROPLET UNDER LINEARLY VARYING MAGNETIC FIELD	
				239	Sachin Phadke, Parth Mistry, Umang Patel, Aditya Bakshi, Ronak Shah, Shaswat Saincher and Jyotirmay Banerjee	WAVE ENERGY CONVERSION USING OSCILLATING WATER COLUMN (OWC) TYPE WAVE ENERGY CONVERTER (WEC)	
				234	Sanganabasappa. A. Biradar, Vadiraj. V. Katti and Naveen Patil	INFLUENCE OF STREAM WISE PITCH ON FLUID FLOW CHARACTERISTICS OF MULTIPLE IMPINGING JETS ON THE FLAT SURFACE	
				82	Nandhu C.S, Ajith A.R, Anoop S, R, Ajith Kumar R and A R Srikrishnan	FLOW STRUCTURES AROUND AN ELLIPTICAL CYLINDER: EFFECT OF ASPECT RATIO	
	NTB L202	Session 17: Multiphase Flow (J3 = 133, 145, 147, 149, 161)	Shyamprasad Karagadde, IIT Bombay	12:00- 12:15		Thematic Session Talk: Shyamprasad Karagadde, IIT Bombay	
					133	Satyendra Patel and Nanda Kishore	RISE OF CONTAMINATED BUBBLE SWARMS OF VOLUME FRACTION 0.001 – 0.1 IN SURFACTANT-LADEN NEWTONIAN LIQUIDS
					145	Basa Nagaraju, Jyotirmay, Subhakanta and Moharana Banerjee	NUMERICAL INVESTIGATION ON FILM-BOILING USING LEVEL-SET METHOD
					147	Parth Thaker, Pratik Joshi and Jyotirmay Banerjee	PARAMETRIC INVESTIGATIONS ON LIQUID SHEET BREAKUP AND ATOMIZATION
					149	Lokesh Kalapala, Jaimin Mistry and Jyotirmay Banerjee	NUMERICAL ANALYSIS OF HEAT TRANSFER IN TAYLOR FLOW THROUGH MICRO CHANNEL
					161	Bhaskar Jyoti Medhi, Vipin Agrawal and Anugrah Singh	μ -PIV/ PTV STUDIES ON SUSPENSION FLOW IN BIFURCATION CHANNELS
13:15- 14:15	NTB Foyer	Lunch					
14:15 - 16:00	NTBL101	Session 18: Nuclear reactor thermal hydraulics (L4 = 4, 17, 136, 163, 233)	Arun K Sridharan, IIT Bombay	14:15- 14:30		Thematic Session Talk: Arun K Sridharan, IIT Bombay	
				4	Amitanshu Mishra, Santosh Kumar Pradhan, Avinash Gaikwad and S. B. Chafle	COLD START-UP TRANSIENT SIMULATION OF ADVANCED NATURAL CIRCULATION BASED BWR USING RELAP5/MOD 3.2	

			17	Ritabrata Saha, Swarnendu Sen, Koushik Ghosh, Saikat Mookherjee, Achintya Mukhopadhyay and Dipankar Sanyal	CONTROL OF INSTABILITY ASSOCIATED WITH THE SINGLE PHASE SQUARE NCL USING ON-OFF CONTROLLER
			136	Vijay K.Veluri, Samiran Sengupta, S. Mammen and S. Bhattacharya	NUMERICAL SIMULATION OF FLOW DISTRIBUTION INSIDE CONTROL FUEL ASSEMBLY FOR A POOL TYPE NUCLEAR RESEARCH REACTOR
			163	G. L. Kumawat, A. K. Kansal, N. K. Maheshwari and P. K. Vijayan	EXPERIMENTAL AND CFD SIMULATION OF POISON JETS IN THE TUBE BUNDLE
			233	Anurag Samantara, U. Partha Sarathy, K. Velusamy and P. Selvaraj	DECAY HEAT REMOVAL FROM INTER VESSEL GAP IN FAST BREEDER REACTORS
ATB Seminar Hall	Session 19: Fundamental Issues and Perspectives (A2 = 140, 142, 156, 186, 262)	K Muralidhar, IIT Kanpur	14:15-14:30		Thematic Session Talk: K Muralidhar, IIT Kanpur
			140	Nripen Mondal, Rana Saha and Dipankar Sanyal	STEADY STATE CHARACTERISTICS OF A DOUBLE AXIAL PAD AEROSTATIC THRUST BEARING HAVING SINGLE ROW AIR FEED
			142	Gone Rajasheker and Chandramohan V. P	INITIAL MOISTURE CONTENT OF AGRICULTURAL PRODUCTS
			156	Ajith A.R, Anoop S, Nandhu C.S, Nithin S.Kumar and Ajith Kumar R.	INTERFERENCE BETWEEN A SQUARE CYLINDER (UPSTREAM) AND A CIRCULAR CYLINDER IN STAGGERED ARRANGEMENT
			186	Majid Hassan Khan, Sooraj P, Atul Srivastava, Atul Sharma and Amit Agrawal	EXPERIMENTAL AND NUMERICAL STUDY OF FLOW AROUND A CUBE
			262	Abdul Razak Kaladgi, Mohammed Sami Dafedar and Arafat Mukthar	EFFECT OF BETA RATIO AND REYNOLDS NUMBER ON COEFFICIENT OF DISCHARGE OF VENTURI METER
NTB L102	Session 20: Micro & Nano Fluid Mechanics (H2 = 106, 125, 169, 209)	Amit Agarwal, IIT Bombay	106	Harry Garg, Sumeeth Kulkarni and Somenath Gorai	EXPERIMENTAL AND NUMERICAL ANALYSIS OF DOUBLE LAYER MICROCHANNEL FOR MICRO SCALE COOLING
			125	N.Kumar , Derosh George, P.V.Manivannan and Ashis Kumar Sen	DEVELOPMENT OF A SOLENOID ACTUATED PLANAR VALVELESS PDMS MICROPUMP
			169	Sangram Kumar Samal and Manoj Kumar Moharana	NUMERICAL STUDY OF TAYLOR BUBBLE BREAKUP BY PLACING OBSTACLE AT THE T-JUNCTION BIFURCATION
			209	Mohammad Abdul Razack, Dora Nagaraju and Venkat Kadimisetti	CFD INVESTIGATION OF THE DESIGN AND THERMO PHYSICAL PROPERTIES OF NANOFUID ON FLAT PLATE SOLAR COLLECTOR
NTB L202	Session 21: Multiphase Flow (J4 = 199, 247, 288, 300, 332)	R Bhardwaj, IIT Bombay	14:15-14:30		Thematic Session Talk: R Bhardwaj, IIT Bombay
			199	Rajlakshmi Nayak, Dhiman Chatterjee and Sarit K. Das	TWO PHASE FLOW STUDIES IN MICROCHANNELS: THE EFFECT OF ASPECT RATIO ON SLUG LENGTH
			247	Navaneeth Krishnan, Ajith M, T. Jayachandran, Jayakumar J. S and Manu Sivan	3D NUMERICAL SIMULATION OF INCOMPRESSIBLE TWO PHASE FLOWS USING FINITE ELEMENT METHOD

					288	Prapanch Nair and Gaurav Tomar	A STUDY OF CAVITY FORMATION DURING WATER-ENTRY OF SOLIDS USING INCOMPRESSIBLE SPH
					300	Sumedh Yadav, Aniruddhe Pradhan and Prashant Kumar Das	SIMULATION OF BUBBLE COALESCENCE USING FREE ENERGY LATTICE BOLTZMANN METHOD
					332	Viraj Suresh Shirodkar	SLUG FLOW MODELLING USING BLENDED DRAG LAW AND INTERFACE TURBULENCE DAMPING
15/12/15	16:00-16:30	NTB Foyer	Tea				
15/12/15	16:30 – 17:15	ATB seminar hall	Invited Lecture: Dr. K. R. Sreenivas, Professor, Jawaharlal Nehru Centre for Advanced Scientific Research Jakkur,Bangalore-560 064.				
15/12/15	17:15 – 17:45	ATB seminar hall	TSI presentation on Flow Measurements (sponsored)				
15/12/15	17:45 onwards	ATB seminar hall	General Body Meeting (NSFMFP)				
15/12/15	19:00 – 20:30	NITK Beach	Conference Dinner				
16th December (Wednesday)							
DATE	TIME	VENUE	Program Details				
16-12-15	19:30-20:30	NTB Foyer	Breakfast				
16/12/2015	9:00 - 10:30	NTB L105	Session 22: Fluid Machinery (G3 = 177, 194, 218, 224)	Anish. S, NITK	177	Nilesh Tiwari, Krishna Kumar and Devranjan Kumar	ANALYTICAL AND EXPERIMENTAL INVESTIGATIONS OF SINGLE STAGE CENTRIFUGAL PUMP PERFORMANCE
					194	Paresh Halder, Ezhil Sabareesh and Abdus Samad,	WELLS TURBINE STALL
					218	Abhilash A. Patel, Vimal K. Patel, Mehul D. Chauhan, and Maitri Thakkar	PERFORMANCE ENHANCEMENT OF POWER TURBINE USING INLET DUCT AND DIFFUSER
					224	Vishnu Prasad, Ruchi Khare and Pranshu Shrivastava	EFFECT OF DRAFT TUBE DIFFUSER ON PERFORMANCE OF KAPLAN TURBINE
		NTB L102	Session 23: CFD Analysis using COMERCIAL Software (D3 = 212, 217, 222, 230)	Atul Sharma, IIT Bombay	212	Vikram Shah, Jyotirmay Banerjee and A. K. Patra	ANALYSIS OF DISPERSION OF HEATED EFFLUENT FROM POWER PLANT: A CASE STUDY
					217	Mukhtar Ahmad Malik and Adnan Qayoum	COMPARISON BETWEEN CFD MODEL AND LUMPED ELEMENT MODEL OF A SYNTHETIC JET ACTUATOR IN QUIESCENT FLOW
					222	K. Meghana Sarat and S Jayavel	NUMERICAL STUDY ON LAMINAR FLOW CHARACTERISTICS FOR FLOW PAST ROTATING CYLINDERS
					230	Anil Kumar Rout and Pandaba Patro	NUMERICAL ANALYSIS FOR LAMINAR FLUID FLOW AND HEAT TRANSFER IN A BEND PIPE

	NTB L202	Session 24: CFD Analysis using COMERCIAL Software (D4 = 139, 200, 206, 269, 279)	Shyamprasad Karagadde, IIT Bombay	139	Hitesh R. Thakare, Aniket Monde and Ashok D. Parekh	COMPUTATIONAL ANALYSIS OF EFFECT OF COLD MASS FRACTION IN RANQUE- HILSCH VORTEX TUBE
				200	Samak Manjushree, Anuj Gupta, Shaik Ismail, Balamurali, and P J Deshpande	EXPERIMENTAL INVESTIGATION OF BOUNDARY LAYER CONTROL OVER AIRFOIL BY MOVING SURFACE AT LOW REYNOLDS NUMBER
				206	Sanand T. V., Pradeep Kumar P, Unnikrishnan Nair P., and Paul .P. George	NUMERICAL AND EXPERIMENTAL EVALUATION OF PERFORMANCE OF CENTRIFUGAL SEALS
				269	Manish Samprathy and Dr.S. R.Nagaraja	EFFECT OF POROSITY ON THE ATTENUATION OF SHOCK WAVE, IN A POROUS MEDIUM
				279	Arjun K.S and Rakesh K.	THERMAL PERFORMANCE OF MINI-CHANNELS BY SIMULATIONS USING NANOFLUID AND NANOTUBE FINS
	ATB Seminar Hall	Session 25: Non Newtonian flow (L1: 107, 138, 143, 144, 176, 328)	R Bhardwaj, IIT Bombay	107	Pradip Gunavant, Sameer Gajghate, Vahid Jamadar and Ganesh Jadhav	CFD ANALYSIS OF LIBR+H ₂ O SOLUTION FALLING FILM OVER INLINE HORIZONTAL TUBES
				138	Anjani Ravi Kiran Gollakota and Nanda Kishore	FLOW AND DRAG PHENOMENA OF SPHEROID BUBBLES IN SHEAR-THINNING POWER-LAW LIQUIDS
				143	Amit Soni, Hemant Naik and Shaligram Tiwari	THREE-DIMENSIONAL FLOW CHARACTERISTICS FOR FLOW ALONG A SQUARE PRISM HAVING BUILT-IN PLANE SIDE FLAPS
				144	Mahendra Prasad, Arunkumar Sridharan and Avinash Gaikwad	MASS TRANSFER COEFFICIENT ENHANCEMENT FACTOR IN 90 DEGREE PIPE BEND
				176	Rajiva Lochan Mohanty, Abhilas Swain and Mihir Kumar Das	FORCED CONVECTION OVER IN-LINE TUBE BUNDLES WITH CIRCULAR AND ELLIPTICAL TUBES
				328	Ranjith Maniyeri	NUMERICAL SIMULATION OF AN ORGANISM SWIMMING IN A CHANNEL USING AN IMMersed BOUNDARY FINITE VOLUME METHOD
10:30- 11:00	NTB Foyer	Tea				
11:00 - 12:00	NTB L105	Session 26: Nuclear reactor thermal hydraulics (L4 = , 196, 204, 278, 314)	A K Sridharan, IIT Bombay	196	B Thilak, P. Mangarjuna Rao, B. K. Nashine and P. Selvaraj	DEVELOPMENT OF NUMERICAL MODEL FOR IN-PIN MOLTEN FUEL RELOCATION IN SFR
				204	Dijo K. David, P. Mangarjuna Rao,B. K. Nashine and P. Selvaraj	INVESTIGATION OF TURBULENT NATURAL CONVECTION IN INTERNALLY HEATED CYLINDRICAL CAVITIES FOR IMPROVING THE COOLING CAPABILITY OF SFR CORE CATCHER
				278	Prashant Sharma, Santosh Pradhan and Avinash Gaikwad	UNCERTAINTY ANALYSIS FOR DETERMINATION OF CRITICAL BREAK FOR A LARGE PHWR
				314	Perumal Selvaraj, K. Natesan, V. Baskaran, K. Velusamy and T. Sundararajan	EXPERIMENTAL SIMULATION OF SLOT AIR JET COOLING FOR IRRADIATION TARGETS

					52	Suvabrata Panja, Uddalok Sen, Tryambak Gangopadhyay, Raunak Roy, Swarnendu Sen and Achintya Mukhopadhyay	COMPARISON OF THERMOACOUSTIC CHARACTERISTICS OF A DUCTED NON-PREMIXED LIFTED FLAME AND A DUCTED INVERSE-DIFFUSION FLAME
		NTB L102	Session 27: Reacting Flows (K = 52, 66, 162, 308)	G Tomar, IISc Bangalore	66	Sathisha H.M and Amaresh Dalal	A THREE DIMENSIONAL ISOTHERMAL, STATIONARY NUMERICAL MODEL OF ALL-VANADIUM REDOX FLOW BATTERY
					162	Rahul B. V, Gaurav Vamja and Jyotirmay Banerjee	ON THE UNSTEADY CHARACTERISTICS OF AN AXISYMMETRIC LAMINAR DIFFUSION FLAME
					308	Sumit Singh, Murali Damodaran and Rajesh Kumar	COMPUTATIONAL MODELING OF FIRE DYNAMICS AND SMOKE IN A TWO-STOREY DUPLEX HOUSE