

ICSDTIR-2021 International Conference



on

Sustainable Development in Technology for 4th Industrial Revolution

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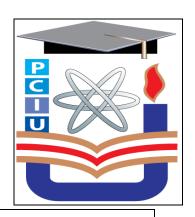
International Conference on Sustainable Development in Technology for 4th Industrial Revolution

PROGRAM SCHEDULE



(Virtually on Zoom)

DATE: MARCH 12-13, 2021



BROADCAST

Live Broadcast



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DAY-1: MARCH 12, 2021 (FRIDAY)

EVENTS

INAUGURAL CEREMONY

Time	Speaker	Speech By	Speech	Additional Information				
09.00AM-09.10AM (BST) 03.00AM-03.10AM (GMT)								
09.10AM-09.15AM (BST) 03.10AM-03.15AM (GMT)	Recitation	Recitation from The Holy Quran						
09.15AM- 09.20AM (BST) 03.15AM- 03.20AM (GMT)	Mr. Deepak Kumar Chowdhury Conference Secretary, ICSDTIR Associate Professor, Dept. of EEE Port City International University, Chattogram.	Organizing Secretary	Conference Overview					
09.20AM- 09.30AM (BST) 03.20AM- 03.30AM (GMT)	Prof. Dr. Md. Nural Anwar Hon'ble Vice Chancellor Port City International University, Chattogram.	Patron	Welcome Speech					
09.30AM- 09.40AM (BST) 03.30AM- 03.40AM (GMT)	Prof. Dr. Celia Shahnaz Chair, IEEE, Bangladesh Section	Special Guest-1	Special Guest Speech	Zoom				
09.40AM-09.50AM(BST) 03.40AM-03.50AM(GMT)	Prof. Dr. M. Majibur Rahman Department of Microbiology, University of Dhaka and Member, BOT&Academic Advisor, PCIU, Bangladesh.	link: https://eu01web.zoom.us/webinar.register/WN aJj191						
09.50AM-09.55AM (BST) 03.50AM-03.55AM (GMT)	PCILLDocumentary Video							
09.55AM-10.00AM(BST) 03.55AM-04.00AM(GMT)	Conference	Proceedings Launching						
10.00AM- 10.15AM(BST) 04.00AM- 04.15AM(GMT)	Mr. Zunaid Ahmed Palak, MP Hon'ble State Minister Information and Communication Technology (ICT) Division Ministry of Post, Telecommunication and Information Technology Government of the People's Republic of Bangladesh.	Keynote Speaker	Keynote Speaker's Speech					
10.15AM- 10.35AM (BST) 04.15AM- 04.35AM (GMT)	Dr. Dipu Moni, M.P MBBS (DMC), LLB (NU), LLM (London), MPH (John Hopkins) Hon'ble Minister Ministry of Education Government of the People's Republic of Bangladesh	Chief Guest	Inaugural Speech					
10.35AM- 10.45AM (BST) 04.35AM- 04.45AM (GMT)	Mr. AKM Enamul Hoque Shameem, MP Hon'ble Deputy Minister, Ministry of Water Resources Government of the People's Republic of Bangladesh. Hon'ble Founder, President & Chairman, Port City International University, Chattogram.	Chief Patron	Vote of Thanks					

ENDING OF INAUGURAL CEREMONY

10.45AM- 11.00AM (BST) 04.45AM- 05.00AM (GMT)

REFRESHMENT BREAK

DAY-1-FIRST SESSION

PARALLEL KEYNOTE SESSION-D1-A

Time	Serial	Speaker	Chair	Topic	Additional Information
11.00AM- 12.00PM(BST) 05.00AM- 06.00AM(GMT)	A1-KS2	Prof. Dr. Celia Shahnaz Chair, IEEE, Bangladesh Section Professor, Department of Electrical & Electronic Engineering, BUET, Dhaka, Bangladesh	Dr. Khondaker A. Mamun, UIU, Bangladesh	Signal, Biomedical and Industrial Applications based on Deep Learning	Zoom link: https://bdren.zo om.us/j/6391836 5816
11.00AM- 12.00PM(BST) 05.00AM- 06.00AM(GMT)	A1-KS3	Prof. Dr. M. Feroze Ahmed Professor Stamford University of Bangladesh	Prof.Dr. Sudip Kumar Pal, CUET	Adaptation to Fourth Industrial Revolution for Sustainable Development in Bangladesh	Zoom link: https://eu01web.z oom.us/j/6725822 7869

PARALLEL TECHNICAL SESSION-D1-A

Time	Serial	Paper Title (2Parallel Sessions) (TEXTILE, CSE)	Paper ID	Authors	Additional Information
		EXPLOITATION OF NATURAL DYE (WATERMELON) INTO THE COLORATION OF CVC FABRIC	35	Md. Rezaul Karim, Salman Ahmed, Tamzid Hossain, Shubhajit Dutta and Rafiul Islam	Session Chair: Prof. Dr. Engr. Md. Zulhas Uddin,
11.00AM- 12.30PM(BST)	A1-TS1 (Smart Textile and Sustainable	art Textile EXTRACTED FROM DRAGON Sakib and Salman Ahmed	Tohidur Zaman Tamim, Asif Sakib and Salman Ahmed	BUTEX, Bangladesh Zoom link:	
05.00AIVI- 06.50AIVI(GIVIT)	Industrialization)	A COMPREHENSIVE ANALYSIS ON MULTIFARIOUS PROSPECTS OF MEDICAL TEXTILES AT GLOBAL MARKET IN CONTEXT OF COVID-19	87	ThoushipWaqer, Md. Nazif Hasan Chowdhury, Md. Abdus Salam and Safwana Hussain	https://eu01web.zo om.us/j/634707350 79
		JUTE: A HIDDEN TREASURE OF	92	Jony Kumar Dey, SanyBarua, Md.	

		DIFFERENT DIVERSIFIED		Rezaul Karim and Rafiul Islam	
		PRODUCT			
11.00AM- 12.30PM(BST) 05.00AM- 06.30AM(GMT)		EVOLVING A NEW SDLC MODEL (TRIGON MODEL) FOR SOFTWARE DEVELOPMENT	36	Md. Farhan Nasir, Md. Jasim Uddin Qureshi, Papri Mitra and Thohidul Islam	Session Chair: Prof. Dr.
		STATISTICAL AND DEEP LEARNING TECHNIQUES BASED TIME SERIES FORECASTING	41	ProsangitKumer Barman, Maqsudur Rahman and Md. Tofael Ahmed	Muhammed Moshiul Haque, CUET, Bangladesh
	A1-TS2 (Machine	CONTENT BASED DYNAMIC SPAM EMAIL FILTERING USING NAÏVE BAYES CLASSIFIER	55	Md. Miraj Ahamad, Muhammad Anwarul Azim and Mohammad Khairul Islam	
	Learning)	SPLITTING BASED TEXTURE CLASSIFICATION USING LOCAL BINARY PATTERN	58	Aditi Sen, Muhammad Anwarul Azim, Mohammad Khairul Islam and TahminaAkter	Zoom link:https://bdren.z oom.us/j/63030523
		STUDENT PERFORMANCE ANALYZING AND PREDICTING BASED ON MACHINE LEARNING APPROACH	67	Md. Hafizur Rahman, Tayube Sharif Khan, Manoara Begum	<u>295</u>
12.30PM- 02.00PM (BST) 06.30AM- 08.00AM (GMT)	•	JUMU'AH PRAY	ER &	LUNCH BREA	K
	J	DAY-1-SECONI	D SES	SION	
	n.a	DALIEL KEVMOTE	CECCI	ON D1 D	

PARALLEL KEYNOTE SESSION-D1-B

Time	Time Serial Speaker Session Chair		Topic	Additional Information	
02.00PM- 03.00PM(BST) 08.00AM- 09.00AM(GMT)	B1-KS3	Dr. Avik Bhattacharya Assistant Professor Department of Electrical Engineering Indian Institute of Technology (IIT),Roorkee, India	Prof. Dr. Mohammad Rubaiyat Tanvir Hossain, CUET, Bangladesh	Future Power Electronics: Opportunities and Challenges	Zoom link: https://eu01web.zoom. us/j/63125660612
02.00PM- 03.00PM(BST) 08.00AM- 09.00AM(GMT)	B1-KS4	Prof. Dr. Khondaker A. Mamun Founder and President - CMED Health Professor, Department of CSE United International University (UIU), Bangladesh	Prof. Dr. QuaziDelwar Hossain, CUET, Bangladesh	Digital Health Inclusion to Achieve Universal Health Coverage	Zoom link: https://eu01web.zoo m.us/j/69706126452

PARALLEL TECHNICAL SESSION-D1-B

Time	Serial	Paper Title (2 Parallel Sessions)	Paper ID	Authors	Additional Information
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		(EEE, CIVIL)					
		DESIGN OF A TRIPLE FEED MICROSTRIP PATCH ARRAY ANTENNA FOR CIRCULAR POLARIZATION AT X-BAND	33	Piyas Chowdhu Hossain and C Hoss	QuaziDelwar	Session Chairs:	
03.00PM- 04.00PM(BST) 09.00AM- 10.00AM(GMT) B1-TS1 (Communication & Wireless Technology)	(Communication	DESIGN AND PERFORMANCE STUDIES OF A HAMMER- SHAPED FED SLOT ANTENNA FOR SUB-6 GHZ 5G APPLICATIONS AT LTE BANDS 42/43	46	Sourav Dha Chakraborty, Mo and Md. Amr	d. Sifat Hossen	Dr. Md. Azad Hossain, CUET, Bangladesh Dr. Muhammad Asad Rahman, CUET, Bangladesh	
		A METAMATERIAL CSRR INSPIRED MICROSTRIP PATCH ANTENNA FOR BANDWIDTH ENHANCEMENT	60	Sneha Deb and M	d Azad Hossain	Zoom link: https://bdren.zoo m.us/j/639492751	
		A COMPACT DUAL BAND MICROSTRIP PATCH ANTENNA WITH GAIN ENHANCEMENT TECHNIQUE FOR X BAND APPLICATIONS	86	Md. Sifat Hossen Haque, Swarup Cl Sourav	hakraborty and	<u>81</u>	
		SUITABILITY OF LIME WITH FLY ASH AS STABILIZERS IN CLAY SOIL FOR CONSTRUCTING RURAL AND LIGHT TRAFFIC ROADS	17	Md. Jamil Ahs Siddio		Session Chair: Prof. Dr. Bipul	
	B1-TS2	AN IN-DEPTH ESTIMATION OF ROAD TRAFFIC ACCIDENT COSTS IN BANGLADESH	29	Md. Jamil Ahsai and Armanas	· •	Chandra Mondal, CUET, Bangladesh	
03.00PM- 04.00PM(BST) 09.00AM- 10.00AM(GMT)	(Structural and Transportation Engineering)	RAIL PASSENGERS SERVICE DURING COVID-19: A CASE STUDY IN CHITTAGONG RAILWAY STATION, CHITTAGONG	49	Md Sifat Bin Sira Ahmed, Muham Haque Chowdhui Helal Uddin and Shariful	nmad Majedul ry, Mohammad I Mohammad	Zoom link: https://eu01web.zo om.us/j/655333093	
		PEDESTRIAN'S BEHAVIOUR ON ROAD CROSSING AT UNSIGNALIZED INTERSECTION BASED ON TWO MAJOR CITY KHULNA AND CHITTAGONG.	50	Md Sifat Bin Sira Ahmed, Khadiza Jahidul Islam an Kabir Ho	AkterRatna, Md d Mohammed	40	
	PA	RALLEL KEYNOTE	SESSIO	N-D1-C			
Time							

					Information		
05.00PM- 06.00PM(BST) 11.00AM- 12.00AM(GMT)	C1-KS5	Prof. Dr. Saifur Rahman Virginia Tech, USA	Prof. Dr. Abdul Hasib Chowdhury BUET, Bangladesh	Sustainable Development in the Global Electric Power Sector	Zoom link: https://eu01web.zo om.us/j/614729341 63		
05.00PM- 06.00PM(BST) 11.00AM- 12.00AM(GMT)	C1-KS6	Dr. Abu Sadat Muhammad Sayem Research Associate Research Ethics Officer & Safety Coordinator Manchester Fashion Institute (MFI) Manchester Metropolitan University, England (UK)	Dr. Mohammad Tajul Islam, AUST, Bangladesh	Digital Design Technology and Sustainable Fashion	Zoom link: https://eu01web.zo om.us/j/612765285 56		

CLOSING OF DAY-1

DAY-2: MARCH 13, 2021 (SATURDAY)

EVENTS

08.45AM- 09.00AM(BST) 02.45AM- 03.00AM(GMT)

PARTICIPANT'S GREETING EXCHANGE

DAY-2-FIRST SESSION

PARALLEL TECHNICAL SESSION-D2-A

Time	Serial	Paper Title (2 Parallel Sessions) (EEE, CIVIL)	Paper ID	Authors	Additional Information
09.00AM- 10.30AM(BST)	A2-TS1 (Power System&	SOLAR IRRADIANCE FORECASTING USING ELMAN NEURAL NETWORK WITH DIFFERENT TRAINING ALGORITHMS	22	Pardeep Singla, Manoj Duhan and Sumit Saroha	Session Chairs: Prof. Dr. Md. Raju Ahmed, DUET,Bangladesh
03.00AM- 04.30AM(GMT)	Energy Conversion)	MULTI-OBJECTIVE MANAGEMENT OF A RENEWABLE MICRO-GRID WITH GRID CONNECTED AND ISLAND MODE OPERATIONS	30	Gnanaprakash M and MangaiyarkarasiS.P	Dr. Nur Mohammad, CUET, Bangladesh

					Zoom link:
		GRID-TIED POWER GENERATION THROUGH CROSS- CONNECTED SOURCE BASED MULTILEVEL INVERTER	38	Rubell Sen Goopta and Avik Bhattacharya	https://bdren.zoom. us/j/64256939205
		A COMPREHENSIVE ANALYSIS OF POWER GRID WITH IEEE 14 BUS SYSTEM MODEL FOR DEREGULATED COMPATIBILITY OF AN ISOLATED GRID	83	Syed Salam	
		APPLICATION OF STRESS INDUCED PIEZOELECTRIC HARVESTERS IN THE CONTEXT OF BANGLADESH	21	Ibrahim Kaiser and Md. Jamil Ahsan	
		A PORTRAYAL OF CULTURAL HERITAGE IN MYMENSINGH: ARCHITECTURAL FEATURES, IDENTIFYING DAMAGES AND PROBABLE CONSERVATION GUIDELINES	73	AnikGouala, Nandita Banik and Limon Paul Joy	Session Chair: Prof. Dr. Saiful Islam, CUET, Bangladesh
09.00AM- 10.30AM(BST) 03.00AM- 04.30AM(GMT)	A2-TS2 (Civil and Environmental Engineering)	DEVELOPMENT OF RAINFALL INTENSITY DURATION FREQUENCY (IDF) CURVES FOR CHATTOGRAM CITY	53	Md. Mehedi Hassan Masum and Dr. Sudip Kumar Pal	Zoom link: https://bdren.zoo m.us/j/612277563
		A SYNOPSIS OF CHILD TRAFFIC CASUALTIES IN BANGLADESH	80	Armana Huq and Md. Mahmud Hasan	<u>53</u>
		PERFORMANCE EVALUATION OF COUNTER BASED CITY BUS SERVICE OF CHATTOGRAM: A CASE STUDY OF METRO PROVATI	74	AnikGouala and Nandita Banik	
	PAR	ALLEL TECHNICA	L SESSI	ON-D2-A	l
Time	Serial	Paper Title (3 Parallel Sessions)	Paper ID	Authors	Additional Information

(CSE, TEXTILE,EEE)

		VISUAL CRYPTOGRAPHY FOR SECURE HARD-COPY TRANSFER	28	Md. Marufur Rahman, Muhammad Anwarul Azim	Session Chair: Dr.
		FUZZY LOGIC BASED DEEP UNDERWATER IMAGE ENHANCEMENT USING CONVOLUTION NEURAL NETWORK	32	MoomtahinaSharly, Ms. TaslimaBinte Hossain	Muhammed Khairul Islam, CU, Bangladesh
10.30AM-12.00PM(BST) 04.30AM-06.00PM(GMT)	A2-TS3 (Image Processing)	HUMAN EAR RECOGNITION USING HISTOGRAM OF ORIENTED GRADIENT	45	Joyasree Chakraborty and Muhammad Anwarul Azim	Zoom link: https://eu01web.zo om.us/j/664414698
		RECOGNITION OF HUMAN IRIS USING HISTOGRAM OF ORIENTED GRADIENTS AND SUPPORT VECTOR MACHINE	54	Nasrin Aktar, Muhammad Anwarul Azim, Mohammad Khairul Islam and TahminaAkter	<u>67</u>
		HAND GESTURE RECOGNITION FOR INTERPRETATION OF SIGN LANGUAGE	56	TahminaAkter, Muhammad Anwarul Azim and Mohammad Khairul Islam	
		THE INVESTIGATION OF CHALLENGES OF IMPLEMENTING INDUSTRY 4.0 IN BANGLADESH	34	Md. Abdus Shabur, MonowarWadudHridoy and KaziAfzalur Rahman	
10.30AM-12.00PM(BST) 04.30AM-06.00PM(GMT)	A2-TS4 (Textile	CASE STUDY OF LEAN MANUFACTURING IMPLEMENTATION IN GARMENTS INDUSTRY: BANGLADESH PERSPECTIVE	78	S. M. Fahim Faisal and Md. Ahesan Kabir	Session Chair: Prof. Dr. Md. MahbubulAlam, CUET, Bangladesh
	manufacturing and Industrial Engineering)	IMPLEMENTATION OF NEW METHOD IMPROVEMENT TECHNIQUES TO INCREASE PRODUCTIVITY IN APPAREL INDUSTRY	91	Niaz Morshed Rifat, Mohammad Tayub, Suva Das and Md. Rafiul Islam	Zoom link: https://eu01web.zo om.us/j/619443996 20
		ROOT CAUSE ANALYSIS & CORRECTIVE ACTION FOR LYCRA DEFORMATION OF DENIM FABRIC HAVING DIFFERENT COMPOSTION	94	Md. Rafiul Islam, Mohammad ShahariaSadek, Imon Ahmed, Md. Rezaul Karim and Niaz Morshed Rifat	
10.30AM-12.00PM(BST) 04.30AM-06.00PM(GMT)	A2-TS5 (Robotics, Control and	A BUDGET-FRIENDLY NON- CONTACT HAND WASH DISPENSER CONSIDERING THE COVID SITUATION IN	64	Fardeen Mahbub, Rashedul Islam, Shouherdho Banerjee Akash and Sayed Abdul Kadir Al- Nahiun	Session Chairs: Prof. Dr. Md. Anwarul Abedin DUET, Bangladesh

A	utomation)	BANGLADESH			
					Dr. Sampad
					Ghosh,
				Papri Mitra, Thohidul Islam, Md.	CUET, Bangladesh
		DUAL AXIS SOLAR EMBEDDED	72	Farhan Nasir, Md. Abu Sayeed,	Zoom links
		POULTRY FARM	12	Md. Jasim Uddin Qureshi and	Zoom link: https://eu01web.zo
				Maqsudur Rahman	om.us/j/688460352
		INTEGRATING BLOCKCHAIN,		SreeLekshmi S, MojtabaEnayati,	
		OPEN RAN AND IOT	82	Bhanu Prakash Poluparthi,	40
		PLATFORMS INTO RURAL	02	Lakshmi Rajagopal and	
		COMMUNITY NETWORKS		SeshaiahPonnekanti	
				Nahiduddin Mohammad Musa,	
		DESIGN AND IMPLEMENTATION		Maruf Rahman, Md.	
		OF A SMART BUILDING	101	PabelSikder, Lamiya Rahman,	
		MANANGEMENT SYSTEM		Md. Mamunur Rahman and Dr.	
				Md Shahrukh Adnan Khan	

Time	Serial	Speaker	Session Chair	Topic	Additional Information
12.00PM- 01.00PM(BST) 06.00AM- 07.00AM(GMT)	A2-KS1	Prof Dr. Zhu Dingju Professor, Director of Computer Application Department South China Normal University, China	Prof. Dr. Rashed Mustafa, CU, Bangladesh	Artificial Intelligence in Education	Zoom link: https://bdren.zoom. us/j/68269143622
12.00PM- 01.00PM(BST) 06.00AM- 07.00AM(GMT)	A2-KS2	Dr. Shekh Md. Mamun Kabir Associate Professor, Dept. Of Wet Process Engineering, Bangladesh University of Textiles, Tejgaon, Dhaka	Dr. Engr. Md. Hasan Ikbal BUFT, Bangladesh	Synthesis of Bio- polyurethane and analyzing its dyeing behavior with disperse dyes	Zoom link: https://eu01web.zo om.us/j/654770325 93
12.00PM- 01.00PM(BST) 06.00AM- 07.00AM(GMT)	A2-KS3	Dr. Amit Banerjee National University of Singapore	Prof. Dr. Md. Anwarul Abedin DUET, Bangladesh	Prospects in Medical Applications	Zoom link: https://eu01web.zo om.us/j/698435297 41
01.00PM- 02.00PM (BST)		T 1		17	

LUNCH BREAK

DAY-2-SECOND SESSION

07.00AM-08.00AM (GMT)

PARALLEL KEYNOTE SESSION-D2-B

Time Serial Spea	er Session Chair	Topic	Additional
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					Information
02.00PM- 03.00PM (BST) 08.00AM- 09.00AM(GMT)	B2-KS4	Prof. Dr. Engr. Mohammad Mahfuzul Islam, P. Eng. Vice-Chancellor Canadian University of Bangladesh	Prof.Dr. Mir Md. Jahangir Kabir, RUET, Bangladesh	Analysis of Prospective Planning and Actions for Bangladesh to become a Tech- leader in 4IR	Zoom link: https://eu01web. zoom.us/j/699288 44811
02.00PM- 03.00PM (BST) 08.00AM- 09.00AM(GMT)	B2-KS5	Prof. Dr. Ichihiko Toyoda Professor Saga University, Saga, Japan	Prof. Dr. Md. NurunnabiMollah, CUET, Bangladesh	Polarization Agile Active Integrated Array Antennas for Next Generation Wireless Systems	Zoom link: https://eu01web.z oom.us/j/6548957 6443

		KEYNOTE S	SESSION-D2-B	}	
Time	Serial	Speaker	Session Chair	Topic	Additional Information
03.00PM- 04.00PM (BST) 09.00AM- 10.00AM(GMT)	B2-KS6	Prof. Dr. Md Atiqur Rahman Ahad Professor Department of EEE University of Dhaka, Bangladesh	Prof. Dr. Asaduzzaman, CUET, Bangladesh	IoT & Video-based Human Activity Analysis for Healthcare & Other Applications	Zoom link:https://bdren. zoom.us/j/695024 11018

CLOSING CEREMONY					
Time	Speaker	Speech By	Speech	Additional Information	
04.00PM- 04.05PM (BST) 10.00AM- 10.05AM (GMT)	PCIU Doc				
04.05PM- 04.15PM (BST) 10.05AM- 10.15AM (GMT)	Mr. SaifuzzamanShikhor, MP Hon'ble Member of Parliament, Government of the People's Republic of Bangladesh.	Special Guest	Special Guest Speech	Zoom	
04.15PM- 04.25PM (BST) 10.15AM- 10.25AM (GMT)	Mr. Mohibul Hassan Chowdhoury, MP Hon'ble Deputy Minister, Ministry of Education, Government of the People's Republic of Bangladesh.	Special Guest	Special Guest Speech	link: https://eu01web.zoom.us/webinar/register/WN_gAwIMCFVRie5a3gEagXnqA	

04.25PM- 04.40PM (BST) 10.25AM- 10.40AM (GMT)	Dr. Hasan Mahmud, MP Hon'ble Minister, Ministry of Information, Government of the People's Republic of Bangladesh.	Chief Guest	Best Paper Award Declaration& Speech	
04.40PM- 04.50PM (BST) 10.40AM- 10.50AM (GMT)	Mr. Swarup Chakraborty Chair, Technical Program Committee Sr. Lecturer Department of Electrical and Electronics Engineering Port City International University.	TPC Chair	Conference Overview	
04.50PM- 05.00PM (BST) 10.50AM- 11.00AM (GMT)	Prof. Dr. Engr. Mafzal Ahmed Chair,Organizing Committee Hon'ble Dean Science & Engineering Faculty Port City International University, Chattogram.	Organizing Chair	Vote of Thanks & Declaration of Closing	

"THE END" OF CONFERENCE