

Program of CIRATM-10

Monastir & Montreal, November 09-11, 2023

Thursday, November 09, 2023	
12h: 00 - 14h: 00	WELCOME & REGISTRATION
14h: 15 - 14h: 45	OPENING CEREMONY
14h: 45 - 21h: 00	SESSION CO-ORGANIZED WITH VESTECHPRO: Montreal & Monastir - in Live Streaming Textile Circularity: Technologies, advances and challenges for a more sustainable textile & clothing sector
14h: 45 - 15h: 10	PLENARY CONFERENCE 1 Prof. Andrée - Anne Lemieux IFM – Kering, Paris- France “Textile Waste - The situation in Southern hemisphere”
15h : 15 - 16h : 30	Session 1: “Processing and recycling of textile waste” Paulette KACI, General Director, Vestechpro, Canada
15h: 15 - 15h : 30	“Mechanical recycling of textile waste: A new resource for composite bricks” Prof. José Carlos Ferreira - Vestechpro
15h: 30 - 15h: 45	“Innovative practices for achieving a new artificial leather circular sector” Prof. Slah Msahli - LGTex, Monastir University, Tunisia
15h: 45 - 16h: 00	“Transforming textile waste into sustainable construction materials: A step towards circular economy” Prof. Hamid Lamoudan – University Of Quebec les Trois-Rivières, Canada
16h: 00 - 16h: 15	“Recycling of textile fibers as a sustainable feedstock for molded pulp packaging” Prof. Tarik Jabrane – Innofibre, Innovation Center for Cellulosic Products, Canada
16h: 15 - 16h: 30	“Recycling of waste cotton fabrics by dissolution and dissociation” Prof. Yixiang Wang, University of McGill, Canada
16h: 30 - 16h: 50	COFFEE BREAK: ON SITE
16h: 50 - 18h: 10	Session 2: “The need for data for the transition from the clothing and textile sector to the circular economy” Paulette KACI, General Director, Vestechpro, Canada
16h: 50 - 17h: 10	“Textile waste in Ontario, Canada: Opportunities for reuse and recycling” Prof. Sabine Weber - Seneca College in the School of Fashion, Canada
17h: 10 - 17h: 30	“Portrait of textile consumption in Montreal” Prof. Ennouri Triki, Vestechpro, Canada
17h: 30 - 17h: 50	“A sustainable approach for textile waste recycling in Tunisia” Prof. Mohamed ben Hassen, LGTex, University of Monastir, Tunisia
17h: 50 - 18h: 10	“Assessing the social impact of CE in the textiles and apparel value chain- Getting the data right and getting the right data” Prof. Lis J. Suarez-Visbal, Utrecht University, Netherlands
19h: 00 – 21h: 00	Round table: Circular fashion industry: Myth or Reality? Montreal & Monastir - in Live Streaming



Friday, November 10, 2023	
Since 08h: 00	WELCOME & REGISTRATION
09h: 00 – 09h: 30	PLENARY CONFERENCE 1 Prof. Chokri CHERIF TÜ Dresden, Germany « Fiber-based sensor and actuator materials for low-latency tactile internet based on 6G and with human-in-the-loop »
09h: 30 – 10h: 00	PLENARY CONFERENCE 2 Prof. Philippe LAVALLE Biomaterials and Bioengineering, Centre de Recherche en Biomédecine de Strasbourg, Strasbourg, France « Supramolecular coatings and hydrogels with antimicrobial properties: from science to business »
10h: 00 – 10h: 30	PLENARY CONFERENCE 3 Prof. Steffen MÜLLER-PROBANDT DIENES Apparatebau GmbH, Germany «Developing spinning technology for textile recycling needs industry 4.0»
10h: 30 – 11h: 00	COFFEE BREAK

ORAL COMMUNICATIONS			
11h: 00 – 11h: 50	Session 3: Technical and Smart Textiles Prof. Chorki CHERIF & Prof. Steffen MÜLLER-PROBANDT	Session 4: Comfort in textile and clothing Prof. Amine HADJ TAIEB & Prof. Taoufik Harizi	Session 5: Sustainable products and processes Prof. Faouzi SAKLI & Prof. Mohamed BEN HASSEN
11h: 00 – 11h: 10	TMST 29: "Towards manufacturing self-regulating PPE for extreme heat" Jung C., Girault E., Leclinche F., Covarel G., Dréan E.	FACO 17*: "Comparative investigation of cut resistance and thermo-physiological-comfort properties of gloves". Jamshaid H., Muhammad N	SMP 6: "Application of the reba method to assess ergonomics and musculoskeletal risk in feed of the arm sewing machine workstations: a case study in garment manufacturing". Jaffel N., Babay A., Hafsa W., Faouzi Sakli F.
11h: 10 – 11h: 20	TMST 17: "Study of absolute humidity on a textile triboelectric generator". Galata SF., Repoulias A., Ertekin M., Pesez J., Anicaux C., Vassiliadis S. and Marmarali A.	FACO 9: "Breathability and moisture management properties of a double-face denim fabric". Algamdy H	DIMA 3: "Sustainable transport in the apparel supply chain using fuzzy-modified dijkstra algorithm". Lahdhiri M., Jmali M., Babay A.
11h: 20 - 11h: 30	TMST 20: "In vitro performance of a biomedical textile treated with nitrogen N2 jet technology". Zidi M., Khoffi F., Kalsi Y., Tazibt A., Girault E., Barbet R., Heim F., Msahli S.	FACO 10: Design of flex fit well-being descriptors. Baghdadi R., Alibi H., Fayala F., Zeng X.	SMP 4: "Sustainable dyeing process of cotton fabrics with mixtures of reactive dyes: reconstruction and reuse of exhausted dyebaths". Moussa R., Souissi M., Chaouch S., Moussa A.
11h: 30 - 11h: 40	TMST 24: "Stent grafts from polymeric material: a novel design to improve the implant durability". Asaad AR., Heim F., Jung C.	FACO 7: "Statistical analysis of judgment of thermal well-being descriptors". Alibi H., Baghdadi R., Fayala F., Zeng X. Z.	SMP 26: "Sustainability and textile potential of tannery wool from chemical processing to textile valorization and dyeing performance". Abdelaoui O., Harizi T., Msahli S.
11h: 40 - 11h: 50	Questions session	Questions session	Questions session
11h: 50 - 12h: 40	Session 6: Waste and water treatment processes Prof. Nizar MEKSI & Prof. Saber BEN ABDESSLAM	Session 7: Futuristic Design Prof. Amine HADJ TAIEB & Prof. Taoufik HARIZI	Session 8: Simulation, modeling in textile materials and processes Prof. Cesar SEGOVIA & Prof. Slaah MSAHIL
11h: 50 – 12h: 00	TRT1*: "Treatment and reuse of textile wastewater using membrane technology" (1) Ben Amar R.	BMC 4: " Biodesign towards a prosperous future for humanity and nature. Koubaa S., Hadj Taieb A., Abdennadher D.	FACO 15: "Systemic analysis of factors influencing efficient garment production in southwest area of Nigeria". Ajila KO.
12h: 00 - 12h: 10	TRT1*: "Treatment and reuse of textile wastewater using membrane technology" (2) Ben Amar R.	TMST 9: "Design process for textile facades and the various stakeholders involved in the production". Turki W., Hadj Taieb A.	DIMA 2: "Mass customization tools: industry 4.0 and 3d simulation". Louati A., Hadj Taieb A.
12h: 10 - 12h: 20	SMP 25: "Removal of textile pollutant	SMP 17: "Living design: valuing nature	SMP 1: "Prediction of the most



	using activated carbon: modelling and interpretation" Sellaoui I., Abdelmottaleb B.L.	instead of exploitation". Fakhfakh M., Hadj Taieb A.	economically advantageous color formulation". Chaouch S., Moussa A. and Ladhari N.
12h: 20 - 12h: 30	SMP 23: "Copper and nickel removal from aqueous solutions using functionalized polyacrylonitrile fibers: equilibrium, kinetic, and thermodynamic studies". Saadouni M., Nadi A., Cherkaoui O., Tahiri M.	TMST 11: "Design of durable and comfortable meta-textile for functional applications". Zribi H., Hadj Taib A., Ignacio G., Ardanuy M.	TMST 14: "Uniaxial tensile properties of Dorlastan® core spun yarns: Effects of yarn count, Dorlastan® Draft, and Dorlastan® linear density on the shape of stress-strain curves". Helali H., Babay A., Jaouchi B., Msahli S., Cheikhrouhou M.
12h: 30 - 12h: 40	Questions session	Questions session	Questions session
12h: 40 - 14h: 00		LUNCH	

	SESSION CO-ORGANIZED WITH CETELOR IN MONASTIR: Montréal & Monastir in Live Streaming		
14: 00 -14h: 30		PLENARY CONFERENCE 1 Prof. Nicolas BROSSE University of Lorraine, LERMAB	
		« Refining natural fibers: New advances »	
14h: 30 -15h: 00		PLENARY CONFERENCE 2 Prof. César SEGOVIA University of Lorraine, LERMAB	
		« Variability of natural fibers and their specific performance in textile applications »	
15h: 00 -15h: 30		PLENARY CONFERENCE 3 Prof. Naceur BEN BELGACEM University of Grenoble Alpes, France	
		« Cellulose as a serious candidate in circular economy »	
15h: 30 - 16h: 10		ORAL COMMUNICATIONS	
15h: 30 - 16h: 00		Session 9: Biobased fibers and materials Prof. Mohamed Ali HAMDI & Prof. César SEGOVIA	
15h: 30 - 15h: 40		BMC 11* : "Feasibility of designing a nettle thread from an artificial plantation" Vibert CC	
15h: 40 - 15h: 50		TMST 31: "Thermal insulation panels based on posidonia oceanica fibrous wastes" Zouari R., Segovia C., Ayadi M., Baffoun A., Brosse N., Msahli S.	
15h: 50 - 16h: 00		BMC 13*: "Flax/polypropylene composites for lightened structures: Multiscale analysis of process and fibre parameters". Doumbia Awa S., Castro M., Jouannet D., Kervoëlen A., Falher T., Cauret L., Bourmaud A. (On line)	
16h: 00 -16h: 10		Questions session	
16h: 10 – 16h: 40		COFFEE BREAK	
16h: 40 - 17h: 10		Session 10: Valorization of vegetal fibers & Nonwovens Prof. Mohamed BEN HASSEN & Prof. Omar CHARKOUI	
16h: 40 -16h: 50		TMST 10: "Valorization of posidonia oceanica, alfa and hemp fibers as thermal insulation and sound absorber panels" Ayadi M., Segovia C., Zouari R., Baffoun A., Brosse N., Msahli S.	
16h: 50 -17h: 00		TMST13: "Development of a Multifonctionnel Wet Laid Nonwoven from Washintognia palm fiber and CMC Binder". Bouaziz M., Zennen S., Ben Hassan M.	
17h: 00 - 17h: 10		FACO 13: "Construction of nonwoven men's dress shirt by adopting special technique of pattern and 3D technology, enabled nonwoven garment acceptable in the garment industry". Cheema M.	
17h: 10 - 17h: 20		Questions session	



POSTERS SESSION		
Prof. Nicolas BROSSE (On line)	Prof. Philippe LAVALLE	Prof. Saber BEN ABDESSLAM
FACO 1: "A study of simplicity apparel using magnet as the closure for the elderly in Vietnam". Anh Dao Tran T., Phuong Duyen Mai T.	SMP 24: "Characterization of chicken white eggshells for possible textile applications". Haddaji H., Jaouachi B., Cheriaa R.	SMP 10: "Participatory risk assessment - deparis: a case study in a tunisian garment manufacturing". Jaffel N., Mâatoug N., Sakli F.
TMST 16: "Development of an instrument for testing moisture regain of textiles towards defining cotton content in fabrics". T. Anh Dao Tran, H. Van Tri, T.V.T. Phuc	SMP 2: "Prediction of dye mixture colorfastness: a preliminary study". Chaouch S., Moussa A., Ladhari N.	FACO 3: "Comfort evaluation of close-fitting clothing using virtual try-on technology". Ancutiene K., Gulbiniene A.
SMP 21: "Acceptability of upcycled fabrics in Southwest Nigeria" Diyaolu I. J.	SMP 14: "3D printed textile accessories with degradable materials for reduced environmental impact". Namouchi A., Kordoghl B	FACO 12: "Well-being factors affecting consumer decision making: Tunisian case". Alibi H., Baghdadi R., Faten Fayala F., Zeng X.
FACO 11: "Optimizing assembly line balancing in manufacturing processes: insights and innovations in AI implementation". Zouhri C., Khedher F., Babay A., Mustapha H., Alami J.	TMST 12: "Efficiencies comparison of zinc pyrithione, silver salt and essential oils against shoes insoles bacteria". Ben Rayana H., Dhouib S., Zouari R., Djelassi B., Elaissi A., Maha Mastouri M., Babay A.	FACO 14: "Touch criteria influencing the purchasing decision of tunisian consumers". Baghdadi R., Alibi H., Fayala F., Zeng X.
DIMA 6: "Advancing assembly line balancing in the apparel industry: state of the art". Zouhri C., Khedher F., Babay A., Hlyal M., El Alami J.	TMST 25: "Textile heart valve: how surface treatment improves/prevents fibroblast viability?" Khoffi F., Khalsi Y., Tazibt A., Kerdjoudj H., Msahli S., Heim F.	TMST 30: Development and application of new ceramic microfiltration membrane from natural zeolite material, Rmili W., R. Ban Amar
	TMST 32*: Evaluation of antibacterial activity of cotton fabrics treated with essential oils. Gargoubi S., Bouaziz A., Dridi D., Zouari A., Bartegi A., Majdoub H. and Boudokhane C.	TMST 30*: Advancing smart agriculture: fuzzy-based decision system for apple harvesting". Iyoubi M., Tetouani S., Bouziane K., Cherkaoui O., Soulihi A.
Questions Session	Questions Session	Questions Session

Saturday, November 11, 2023	
Since 08h: 00	WELCOME & REGISTRATION
09h: 00 – 09h: 30	PLENARY CONFERENCE 1 Prof. Frédéric HEIM Laboratory of Physics and Méchanics of Textile, University of Haute-Alsace, Mulhouse, France « Tissue Engineered Cardiovascular Devices - Strength and Durability Concerns »
09h: 30 – 10h: 00	PLENARY CONFERENCE 2 Prof. Amine HADJ TAIEB Textile Engineering Laboratory, University of Monastir, Tunisia « Metamaterial textiles design: barrier effects, optical illusions and the prospects of invisibility»
10h: 00 – 10h: 30	COFFEE BREAK



ORAL COMMUNICATIONS			
10h: 30 – 11h: 20	Session 11: Functionalization and Ecological Textiles Prof Abdelaziz LALLAM & Prof. Soufien DHOUIB	Session 12: Biobased textiles and recycling Prof. Frederic HEIM & Prof. Nicolas BROSSE	Session 13: Finishing and advanced dyeing Prof. Omar CHARKOUI & Prof. Nizar MEKSI
10h: 30 - 10h: 40	SMP 30*: "Bacti Cleaner: Innovative Textile Nanosilver Based Treatment for Effective and Durable Medical Protection" Ramzi Maalej	BMC 2: "Study of the tensile performance of composite materials based on tire rubber and natural wasted fibers". Boudagga M., Khedher F., Jaouachi B.	SMP 20: "Comparative study of one-bath and two-bath dyeing procedures of double-faced cotton/polyester fabric". Zarrouk H., Elamri A., Charfi A., Hamdaoui M.
10h: 40 - 10h: 50	SMP 9: "Plasma jet technology to improve the hydrophobicity of flax fabrics". Sassi FZ., Zouari R., Baffoun A., Sonnier R., Longuet C., Msahli S.	BMC 7: "Effect of chemical treatment parameters on physical and mechanical properties of doum palm fibers". Zannen S., Ghali L., Ben Hsan M.	SMP 7: "On the valorization of certain components extracted from opuntia ficus indica l. in textile finishing". Ibn Ali A., Hedfi H., Hamdaoui M
10h: 50 - 11h: 00	SMP 28*: "Development of a new eco-friendly binder". Mezheri A., Benzarti M., Ivanov D., Lallam	TMST 23: "Evaluation of the Performance of the Elastic Band Used on Stretch Fabrics". Helali H., Debbichi M., Mani H., Gaabout A.	TMST 26: "Efficient adsorption of acid blue 74 from aqueous solutions using amino-functionalized cellulose loaded with Fe3O4 Nps". Sidia N., El Ghali A., Chaabane L., Baffoun A., El Haskouri BJ., Baouab MHV.
11h: 00 - 11h: 10	SMP 29*: "Effect of FE203/TIO2 additions on mechanical and chemical properties of phosphate glass fibers". Daki I., El Bouchti M., Saloumi N., C. Assamadi C., Oumam M., Cherkaoui O., Hannache H.	SMP 22: "Thermal behavior of polymer pellets of virgin polyester pet compared to recycled polyester". Abdel-Mouttalib K., Nadi A., Cherkaoui O., Touhtouh S.	FACO 6: "Influence of relative humidity and storage configuration of knitted fabrics in a production line on the phenomenon of sorption". Sayahi M., Hedfi H., Hamdaoui M.
11h: 10 - 11h: 20	Questions session	Questions session	Questions session

11h: 20 - 12h: 40	Session 14: Technical and Smart Textiles Prof. Chorki CHERIF & Prof. Steffen MÜLLER-PROBANDT	Session 15: Functionalization and Ecological Textiles Prof. Abdelaziz LALLAM & Prof. Naceur BEN BELGACEM
11h: 20 - 11h: 30	TMST 8: "Study of treated leather antimicrobial properties". Ben Rayana H., Zouari R., Dhoubib S., Chaouch W., Babay A., Djelassi B., Mastouri M., Khemir H., Somai N.	SMP 12: "Flame retardancy of cotton fabric based on chicken eggshells". Haddaji K., Cheriaa R., Jaouachi B
11h: 30 - 11h: 40	TMST 3: "Production of a fully fireproof PVC synthetic leather article". Stambouli M., Chaouch W., Gargoubi S., Zouari R., Msahli S.	BMC 8: "Nanofibrillated cellulose from Natural Fibers for Food Applications". Ridene S., Ben Marzoug I., Ghali L., Msahli S.
11h: 40 - 11h: 50	TMST 28: "Development of a biobased conductive link formulation and its application through screen printing for electronic textile development". Batine A., Boumegnane A., Nadi A., Cherkaoui O., M. Tahiri M	TMST 12: "Efficiencies comparison of zinc pyrithione, silver salt and essential oils against shoes insoles bacteria". Ben Rayana H., Dhoubib S., Zouari R., Djelassi B., Elaissi A., Mastouri M., Babay A.
11h: 50 -12h: 00	TMST 29*: "Smart textile sensors empowered by piezoelectric energy harvesting". Khadija Oumghar K., Chakhchaoui N., Eddiai A., Cherkaoui O.	SMP 26*: "A new protective textile based on the aerogel as charge for poly-cotton fabric". Assal M., El wazna M., El bouchti M., El Bouari A., Cherkaoui O.
12h: 00 - 12h: 10	Questions session	Questions session
12h: 10 - 12h: 40	CLOSING CEREMONY	
13h: 00 - 17h: 00	LUNCH AND TOUR OF MONSATIR CITY	

