



Manipal University Jaipur's Role in Cooperative Planning for Climate Disasters

As climate change continues to exacerbate the frequency and intensity of natural disasters, Manipal University Jaipur (MUJ) is playing a proactive role in cooperative planning for climate disasters. Recognizing the growing risks posed by climate-induced events such as extreme heat, floods, droughts, and storms, MUJ has joined hands with local government authorities, disaster management agencies, and community organizations to develop comprehensive strategies for disaster preparedness, response, and recovery. Through this cooperative approach, the university is contributing to building a climate-resilient region capable of facing future challenges.

MUJ works closely with local and regional government bodies responsible for disaster risk management, including municipal authorities and state-level disaster management departments. Through this collaboration, the university provides valuable research, data, and expertise to help identify vulnerable areas, assess potential risks, and develop robust disaster management plans. This partnership ensures that MUJ's academic resources and technical knowledge are utilized effectively in local climate disaster planning. MUJ contributes to disaster risk assessments by leveraging its academic expertise in fields such as environmental science, geography, and data analytics. The university conducts research to map climate vulnerabilities within the region, focusing on areas prone to floods, heatwaves, droughts, and other extreme events. These assessments help local authorities and community groups better understand the potential risks and plan accordingly to mitigate disaster impacts. MUJ plays a critical role in building the capacity of both its internal community and the local population to respond effectively to climate disasters. The university organizes regular training sessions, workshops, and simulation exercises on disaster preparedness, emergency response, and recovery strategies. These training programs are conducted in collaboration with local government agencies and focus on equipping participants with the skills needed to handle disaster situations, such as first aid, evacuation protocols, and resource management during emergencies. MUJ's students and faculty are involved in awareness campaigns that educate the local community about disaster preparedness, emphasizing the importance of personal safety measures, home fortification, and community-level planning.

In line with its Climate Action Plan, MUJ is implementing sustainable and climate-resilient infrastructure across its campus. This includes designing buildings that can withstand extreme weather events, implementing water conservation systems such as rainwater harvesting, and ensuring energy reliability through renewable sources like solar power. By adopting these practices, MUJ is safeguarding its own operations during disasters and is serving as a model for sustainable infrastructure in the region. MUJ actively involves local community groups and NGOs in disaster planning initiatives, recognizing that climate disasters require a coordinated response from all sectors of society. The university helps facilitate community-led discussions on climate disaster risks, preparedness strategies, and resilience building. Through cooperative forums, MUJ ensures that disaster planning is inclusive and considers the needs of vulnerable





populations, such as rural residents, low-income households, and elderly members of the community. MUJ contributes to policy development by sharing its research and findings with policymakers at local and state levels. The university conducts research on climate change adaptation, disaster mitigation techniques, and community-based resilience strategies, providing evidence-based recommendations that inform government policies and disaster management frameworks. MUJ also collaborates with national and international organizations on research projects focused on climate resilience, disaster recovery, and sustainable urban planning. These partnerships enable the university to access global best practices and bring innovative solutions to the local context.

Manipal University Jaipur's participation in cooperative planning for climate disasters reflects its commitment to protecting both the campus and the wider community from the growing threats posed by climate change. Through collaboration with local government authorities, disaster management agencies, and community groups, MUJ plays a key role in developing comprehensive strategies for disaster risk assessment, preparedness, response, and recovery. By fostering a culture of resilience and sustainability, MUJ is helping to build a future where both the university and the region can withstand and adapt to the challenges of climate-induced disasters.





List of Cross border collaboration in Research for Climate Action

Title	Authors	Year	Scopus Source title	Institutions	Sustainable Development Goals (2023)
Beeswax as a potential replacement of paraffin wax as shape stabilized solar thermal energy storage material: An experimental study	Rathore, P.K.S. Gupta, K.K. Patel, B. Sharma, R.K. Gupta, N.K.	2023	Journal of Energy Storage	GLA University Chandigarh University Manipal University Jaipur	SDG 7 SDG 12 SDG 13
Durability and microstructural behavior of Nano silica-marble dust concrete	Kashyap, V.S. Sancheti, G. Yadav, J.S.	2023	Cleaner Materials	National Institute of Technology Hamirpur Manipal University Jaipur	SDG 9 SDG 13
Production of H2 and CNM from biogas decomposition using biosolids-derived biochar and the application of the CNM-coated biochar for PFAS adsorption	Patel, S. Hedayati Marzbali, M. Hakeem, I.G. Veluswamy, G. Rathnayake, N. Nahar, K. Agnihotri, S. Bergmann, D. Surapaneni, A. Gupta, R. Sharma, A. Shah, K.	2023	Waste Management	University of Alberta Manipal University Jaipur Royal Melbourne Institute of Technology University	SDG 6 SDG 11 SDG 13
A comprehensive review of machine vision systems and artificial intelligence algorithms for the detection and harvesting of agricultural produce	Dhanush, G. Khatri, N. Kumar, S. Shukla, P.K.	2023	Scientific African	Koneru Lakshmaiah Education Foundation Manipal University Jaipur Manipal Academy of Higher Education	SDG 2 SDG 8 SDG 11 SDG 13
Comparative experimental investigations on a low- cost solar cooker with energy storage materials for sustainable development	Khatri, R. Goyal, R. Sharma, R.K.	2023	Results in Engineering	Manipal University Jaipur	SDG 7 SDG 13





5E analysis of a novel designed hot water storage header integrated vacuum tube solar water heater	Chopra, K. Tyagi, V.V. Pathak, S.K. Sharma, R.K. Mansor, M. Goel, V. Sari, A.	2023	Thermal Science and Engineering Progress	National Institute of Technology Hamirpur King Fahd University of Petroleum and Minerals Shri Mata Vaishno Devi University Universiti Tenaga Nasional Karadeniz Technical University Manipal University Jaipur	SDG 7 SDG 13
A Cost-Emission-Based Multi-objective Dynamic Economic Dispatch Considering Solar-Wind Curtailment Cost	Rai, A. Shrivastava, A. Jana, K.C.	2023	IETE Journal of Research	Indian Institute of Technology, Dhanbad Manipal University Jaipur	SDG 7 SDG 13
An Econometric Analysis of India's Urbanization, Energy Consumption, Economic Growth and CO2 Emission	Sharma, T. Sharma, M. Mehrotra, S. Grima, S.	2023	International Journal of Environmental Impacts	University of Latvia University of Malta Manipal University Jaipur	SDG 8 SDG 13
Climate trends and maize production nexus in Mississippi: empirical evidence from ARDL modelling	Sharma, R.K. Dhillon, J. Kumar, P. Bheemanahalli, R. Li, X. Cox, M.S. Reddy, K.N.	2023	Scientific Reports	United States Department of Agriculture Mississippi State University Manipal University Jaipur	SDG 2 SDG 13
Ecofriendly Multi-Agent-Based Smart MicroGrid Architecture Simulation and Analysis Using HOMER Grid	Gurjar, G.S. Kumar, P. Singh, B.P. Singh, D. Sharma, V.	2023	Lecture Notes in Electrical Engineering	Rajasthan Technical University Manipal University Jaipur	SDG 7 SDG 9 SDG 13





Biomaterials: A Sustainable Solution for a Circular Economy †	Rajvanshi, J. Sogani, M. Kumar, A. Arora, S.	2023	Engineering Proceedings	CSIRO Manipal University Jaipur	SDG 9 SDG 13
Green Hydrogen as a Clean Energy Resource and Its Applications as an Engine Fuel †	Taneja, S. Jain, A. Bhadoriya, Y.	2023	Engineering Proceedings	Manipal University Jaipur	SDG 7 SDG 8 SDG 9 SDG 13
A Review on the Prospects of Various Gaseous Fuel as an Automotive Fuel and for Reducing Environmental Pollution	Singh, D. Dadhich, J. Bhadoriya, Y. Taneja, S.	2023	Evergreen	Manipal University Jaipur	SDG 7 SDG 13
Analyzing the Different EV Policy and Strategy Components Essential in Deploying the Electric Mobility in India	Shrivastava, A.	2023	Lecture Notes in Electrical Engineering	Manipal University Jaipur	SDG 7 SDG 13
Predictive Model for Agriculture Using Markov Model	Gupta, P. Bharadwaj, S. Singh, A. Saini, D.K.	2023	Lecture Notes in Networks and Systems	Amity University, Noida Manipal University Jaipur	SDG 13
An analysis of firms' environmental performance: an empirical study of Carbonex firms in India	Sharma, J. Verma, S.	2023	International Journal of Business and Systems Research	Manipal University Jaipur	SDG 12 SDG 13
Climate change and business development: a critical analysis of ways to achieve sustainable development	Mahecha, M. Punia, M.	2023	Revista Brasileira de Politicas Publicas	Manipal University Jaipur Manipal Academy of Higher Education	SDG 8 SDG 12 SDG 13 SDG 16
Identifying and ranking factors affecting environmental sustainability in the hotel industry using the analytical hierarchy process	Singh, M. Sharma, M.K. Yadav, V.	2023	AIP Conference Proceedings	Manipal University Jaipur	SDG 12 SDG 13
Predict the Temperature Rise using Facebook's Prophet Model	Tewari, S. Kaur, A. Das, N.N. Bhatia, M.	2023	2023 International Conference on Advances in Computation, Communication and Information Technology, ICAICCIT 2023	Manav Rachna International University Manipal University Jaipur Amity University, Noida	SDG 13





Nature Relatedness, Eco-centric Concerns, Future Time Perspective, and Pro-ecological Behavior in Young Adults	Jain, P. Singh, S.	2023	IOP Conference Series: Earth and Environmental Science	Manipal University Jaipur	SDG 3 SDG 13 SDG 15
Designing and Implementation of a Solar PV Station for Electric Vehicle Charging: PV–EV Charging	Singh, B.P. Goyal, S.K. Siddiqui, S.A. Saraswat, A.	2023	Lecture Notes in Electrical Engineering	Manipal University Jaipur	SDG 7 SDG 8 SDG 13
Environmental Concerns, Communal Orientation, and Environmental Self-Efficacy as Predictors of Ecologically Conscious Consumer Behaviour Among Young Adults	Singh, S. Khanwani, G.	2023	IOP Conference Series: Earth and Environmental Science	Manipal University Jaipur	SDG 12 SDG 13
Profit Optimization for a Manufacturing Supply Chain Under Carbon Emission and with Inventory - Price Based Demand	Shekhawat, S. Rathore, H. Sharma, K.	2023	Brazilian Journal of Operations and Production Management	Manipal University Jaipur	SDG 8 SDG 9 SDG 13
Inductive Power Transfer Modelling for Wireless Charging of Electric Vehicles	Arpitha, C.S. Jadoun, V.K. Jayalakshmi, N.S. Kanwar, N.	2023	Lecture Notes in Electrical Engineering	Manipal University Jaipur Manipal Academy of Higher Education	SDG 7 SDG 13
A New Dynamic Threshold Based Energy Saver Resource Allocation method for Cloud Infrastructure	Vats, S. Jain, P. Baranwal, D.	2023	Proceedings of the 2nd International Conference on Edge Computing and Applications, ICECAA 2023	Manipal University Jaipur	SDG 12 SDG 13
Characterisation of biochar and estimation of net GHG emissions from Prosopis Juliflora biomass for soil and solid fuel application	Gupta, S. Vinayak More, R. Yadav, A.	2023	Materials Today: Proceedings	Manipal University Jaipur	SDG 13 SDG 15
Prediction of Short-Term Solar Radiation Using Machine Learning Methods	Singh, P.K. Saraswat, A. Gupta, Y. Goyal, S.K.	2023	Lecture Notes in Electrical Engineering	Manipal University Jaipur BML Munjal University	SDG 7 SDG 13





OPTIMIZED GREEN COMPUTING ON SERVICE- ORIENTED INFRASTRUCTURE PLATFORM DEPLOYMENT MODEL	Vignesh, U. Rajendiran, P. Anandan, P. Jeyakrishnan, V. Saravanakumar, M. Padmanaban, K. Saranya, N. Senthil Kumar, A.M. Raja, G.	2023	Journal of Engineering Science and Technology	Vellore Institute of Technology Koneru Lakshmaiah Education Foundation Vel Tech University Anna University Manipal University Jaipur	SDG 7 SDG 9 SDG 13
An Investigation of Climate Change, Eco-Anxiety and			IOP Conference Series:	JECRC University	
Risk Perception in The Context of Theory of Planned	Arya, B. Kumar, H.	2023	Earth and Environmental	Manipal University	SDG 13
Behaviour			Science	Jaipur	
Applications of recycled solid substances of solar photovoltaic modules and their environmental impact analysis	Sheoran, M. Kumar, P. Sharma, S. Ranjan, P.	2023	Nanotechnology- Enhanced Solid Materials: Design, Synthesis, Properties, Applications, and Perspectives	Manipal University Jaipur	SDG 7 SDG 8 SDG 12 SDG 13
Implementation of Green Technology in Cloud	Bhatia, S. Shrivastava,	2023	Lecture Notes in	Manipal University	SDG 7 SDG 12 SDG
Computing	A. Nigam, R. Gupta, P.		Networks and Systems	Jaipur	13





Country wise collaboration for Climate Action





Department	Title of the	Name of the collaborating	Name of	Date of	Duration	Nature of the activity
	collaborative	agency with contact	the MUJ	collaboration		(Research
	activity	details	participant	(DD-MM-		paper/Project/Academic
				YYYY)		development)
Biosciences	Characterization of	IIS University Jaipur	Dr Rohit	5/31/2023	1 Year	Research Paper
	AgNPs		Jain			
	biosynthesized from					
	stem and					
	leaf extracts of					
	Cissus					
	quadrangularis and					
	C. rotundifolia					
Biosciences	Exploring Plant	Uiversity of Rajasthan	Dr Rohit	2/16/2023	6 months	Research Paper
	Tissue Culture and	Jaipur	Jain			
	Steviol Glycosides					
	Production in					
	Stevia rebaudiana					
	(Bert.) Bertoni: A					
	Review					
Biosciences	Bacteria assisted	Department of Molecular	Dr Abhijeet	4/23/2023	1 Year	Research Paper
	green synthesis	Biology and Biotechnology,	Singh			
	of copper oxide	Maharana Pratap University				
	nanoparticles and	of Agriculture and				
	their potential	Technology, Udaipur,				
	applications as					
	antimicrobial					





	agents and plant					
Dissoing	growth stimulants	Department of Melecular	Dr Abbilant	2/14/2022	(months	Docoarah Danor
biosciences	Bioprospecting of	Department of Molecular	Dr Abnijeet	2/14/2023	6 months	Research Paper
		Biology and Biotechnology,	Singn			
	bacteria for effective	Rajasthan College of				
	bioremediation of	Agriculture, Maharana				
	agricultural by-	Pratap University of				
	product and	Agriculture and				
	synthetic pollutant	Technology, Udaipur				
	dyes	ICAR-Indian Institute of				
		Soil Science, Bhopal				
		Department of				
		Environmental Science,				
		V.B.S. Purvanchal				
		University, Jaunpur				
Biosciences	Efficacy evaluation	"Department of Molecular	Dr Abhijeet	1/1/2023	6 months	Research Paper
	of newly isolated	Biology and Biotechnology,	Singh			
	zinc solubilizing	Rajasthan College of				
	bacteria	Agriculture, Maharana				
	for their potential	Pratap University of				
	effect on maize	Agriculture and				
	(Zea mays L.) under	Technology, Udaipur				
	zinc	ICAR-Indian Institute of				
	deficient soil	Soil Science, Bhopal				
	conditions	Department of				
		Environmental Science,				





		V.B.S. Purvanchal				
		University, Jaunpur"				
Biosciences	Comparative	Department of Plant	Dr Rakesh	7/1/2022	1 year	Research Paper
	evaluation of native	Pathology, Rani Lakshmi	Kumar			
	Trichoderma	Bai Central	Sharma			
	species from	Agricultural University,				
	groundnut	Jhansi, Uttar Pradesh				
	rhizosphere against	284003, India				
	stem rot caused by	Division of Plant				
	Sclerotium rolfsii	Protection, ICAR-Central				
	Sacc	Plantation				
		Crops Research Institute,				
		Regional Station, Vittal,				
		Karnataka 574 243, India				
		Department of Plant				
		Pathology, Sri Karan				
		Narendra				
		Agriculture University,				
		Jobner, Jaipur, Rajasthan				
		303328,				
		India				
Chemistry	Recent Update on	, Gachon University, 1342	Dr.	1/1/2023	6 Months	Research paper
	Alkylation of Indole	Seongnam-daero,	Meenakshi			
	and Its Derivatives	Seongnam, Gyeonggi,	Pilania			
	Using N-	13120 South Korea				
	Tosylhydrazone					



Electrical	Industry-Challenge	Government Engineering	Dr. Neeraj	7/17/2023	1 yr	Research Paper
Engineering	to pro-	College Banka Patna,	Kanwar			
	environmental	Manipal Institute of				
	manufacturing of	Technology India,				
	goods replacing	Universiti Sultan Zainal				
	single-use plastic by	Abidin Malaysia, University				
	Indian Industry: A	Technology Malaysia				
	study towards	(UTM), Badghis University				
	failing ban on	Afghanistan				
	single-use plastic					
	Access					
Biotechnology	Research Project	Dr. Raj Kumar, Indian	Dr.	5/31/2023	3 years	Secured research funding
and Chemical		Rubber Manufacturers	Abhishek			from external agency
Engineering		Research Association, 254/1	Sharma			(DST) through Joint
		B, Rd Number 16U,	and Dr.			project
		Neheru Nagar, Wagle	Anees			
		Industrial Estate, Thane	Ahmed			
		West, Thane. rk@irmra.org	Yunus			
			Khan			
Biotechnology	Research Paper	Dr. Agus Saptoro, Curtin	Dr.	5/29/2023	6 months	Research Paper
and Chemical		University Malaysia	Abhishek			
Engineering			Sharma			
Chemistry	Research	Ground Water Department,	Dr. Naveen	1/1/2023	6 Months	research
		Jaipur, Rajasthan, India	Kumar			paper: Geophysical and
			Singh			geostatistical assessment
						of groundwater and soil





						quality using GIS, VES
						and PCA techniques in
						the Jaipur region of
						Western India
Chemistry	Research	, Amity School of Applied	Dr. Praveen	1/1/2023	12 month	Research Paper:Role of
		Sciences, Gurugram,	Kumar			Ag and g-C3N4 over
		Haryana, India	Surolia			CaTiO3 for effective
						photocatalytic
						degradation of
						nitrobenzene
Chemistry	Research	Department of Computer	Dr. Praveen	1/1/2023	12 month	Research Paperr:
		Engineering, Modeling,	Kumar			Molecular Structure-
		Electronics and Systems,	Surolia			Based Prediction of
		University of Calabria,				Absorption Maxima of
		87036 Rende, Italy				Dyes Using ANN Model
Chemistry	Research	IIT delhi, Dr. Anita	Dr. Veena	1/1/2023	36 month	Research paper:
		Sanwaria,	Dhayal			Precursor-ligand induced
		anitarajchem@gmail.com				steric control over
						morphology in
						anisotropically consistent
						(a-quartz) GeO2
						nanomaterials and its
						photocatalytic potential
						under direct sunlight



Mechanical	Research	School of Mechanical	Dr Ravi	7/1/2023		Research
Engineering		Engineering, Shri Mata	Kumar			
		Vaishno Devi University,	Sharma			
		Katra 182320, Jammu &				
		Kashmir, India				
Physics	Research	Department of Physics, NIT	Dr.	1/1/2023	5Y	Research Paper
	Collaboration	Durgapur	Nilanjan			
Mechanical	Research	University Centre for	Dr Ravi	9/15/2023		Research
Engineering		Research & Development,	Kumar			
		Department of Mechanical	Sharma			
		Engineering, Chandigarh				
		University, Mohali, Punjab-				
		140413, India				
Mechanical	Research	School of Energy	Dr Ravi	8/1/2023		Research
Engineering		Management, Shri Mata	Kumar			
		Vaishno Devi University,	Sharma			
		Katra 182320, J&K, India				
Mathematics	Sisko nanofluid	Mohammed S. Alqahtani,	Dr Reema		2023	Research Paper
& Statistics	flow through	BioImaging Unit, Space	Jain			
	exponential	Research Centre, Michael				
	stretching sheet	Atiyah Building, University				
	with swimming of	of Leicester, United				
	motile gyrotactic	Kingdom				
	microorganisms:					
	An application to					
	nanoengineering					



Mathematics	Heat and Mass	S.	Dr Reema		2023	Research Paper
& Statistics	Transport in Casson	Eswaramoorthi,Department	Jain			
	Nanofluid Flow	of Mathematics, Dr. N.G.P.				
	over a 3-D Riga	Arts and Science College,				
	Plate with	Coimbatore 641035, Tamil				
	Cattaneo-Christov	Nadu, India				
	Double Flux: A					
	Computational					
	Modeling through					
	Analytical Method					
Mathematics	Analysis and	D L Suthar, Wollo	Dr Garima		2023	Research Paper
& Statistics	Estimation of	University, Ethiopia	Agrawal			
	COVID 19					
	pandemic by					
	modified homotopy					
	perturbation					
	method					
Economics	Research paper	Mississippi State University	Mr Pushp	10/3/2023	0	RESEARCH PAPER
			kumar			





Memorandum of Understanding

Between

Manipal University Jaipur, India

&

Faculty of Civil Engineering,

Czech Technical University in Prague,

This Memorandum of Understanding (**MoU**) is drawn up and agreed upon to establish the initial framework for cooperation between Manipal University Jaipur Village Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur-303007, India and Faculty of Civil Engineering, Czech Technical University in Prague, Thákurova 7, 166 29 Praque 6 – Dejvice, Czech Republic.

MANIPAL UNIVERSITY JAIPUR, (hereinafter referred to as "**MUJ**" which expressions shall mean and include, unless repugnant to the context or meaning thereof its successors-in-interest and permitted assigns) a State Private University Constituted vide the Manipal University Jaipur Act 2011 (Act No. 21 of 2011), with its campus at Village Dehmi kalan, Tehsil Sanganer, Off. Jaipur-Ajmer Expressway, Ajmer Road, Jaipur

Memorandum of Understanding between MUJ and FCE CTU

Page 1 of 6

Sign CE CTU MUJ

303007, has authorized **Dr. Nitu Bhatnagar, Registrar, MUJ** to enter into this **MoU on** it's behalf as the FIRST PARTY.

The permanent campus of the university is set up on 122 acres of land at Dehmi Kalan village near Jaipur, and is by far one of the best campuses in the region. MUJ has world class infrastructure, including state-of-the-art research facilities and modern library. In line with Manipal University's legacy of providing quality education, the university uses the latest and innovative methods and technology to impart education. The multidisciplinary university offers career-oriented courses at all levels, i.e., UG, PG and Doctoral and across diverse streams, including Engineering, Architecture, Planning, Fashion Design, Hospitality, Humanities, Commerce, Management, Communication, Basic Sciences, Law etc.

AND

Faculty of Civil Engineering, Czech Technical University in Prague (herein after referred to as "FCE CTU", which expressions shall mean and include, unless repugnant to the context or meaning thereof its successors and permitted assigns) has authorized Prof. Ing. Jiří Máca, CSc., Dean, Faculty of Civil Engineering, CTU to enter into this MoU as the SECOND PARTY;

Faculty of Civil Engineering, Czech Technical University in Prague, is the largest of the eight faculties comprising the Czech Technical University in Prague and was established on January 18, 1707. The university is one of the largest and oldest technical universities in Europe. Currently, the university has eight faculties: Civil Engineering, Mechanical Engineering, Electrical Engineering, Nuclear Science and Physical Engineering, Architecture, Transportation Sciences, Biomedical Engineering, and Information Technology. There are over 18,000 students studying at the university and in the 2021/22 academic year, 227 accredited study programmes are being offered, 94 of which are delivered in a foreign language. The university educates experts in the field of technology, and also scientists and managers with knowledge of foreign languages, who are dynamic,

Memorandum of Understanding between MUJ and FCE CTU



Page 2 of 6

flexible and able to adapt quickly to market requirements. The Faculty of Civil Engineering comprises of 24 departments and 3 research departments encompassing different domains of civil engineering.

"MUJ" and "FCE CTU" are hereinafter, wherever the context so admits, collectively referred to as the "Parties" and individually as a "Party".

AND WHEREAS the purpose of MoU is to establish an understanding of mutual cooperation between **MUJ** and **FCE CTU**, providing a common platform for deriving mutual advantages in their pursuit of higher learning in general and benefiting their respective students and faculties, by way of exposure to each other's programs, in particular.

Article I: Scope

The initially proposed activities within the scope of the current MoU are:

- a) Activities leading to development of joint projects related to:
 - Student Exchanges,
 - Faculty Exchanges,
 - Faculty & Staff Development,
 - Working on Collaborative Research Projects.

b) Defining new areas of collaboration that have not been foreseen, but can be beneficial to the Parties.

c) Intellectual Property: Unless and otherwise agreed in writing in relation to specific project or academic activities, all intellectual property belonging to a party

Memorandum of Understanding between MUJ and FCE CTU

Page 3 of 6

Sign FCECTU

providing it to other party for obtaining the object of this MoU, during the course of this MoU shall remain the property of the party providing it. Any intellectual property rights created in the course of activities anticipated by this MoU shall be shared equally by both the institutions.

Article II: Duration, Termination and Amendment

a) The MoU will be effective from the date of signing by both parties for a period of up to five (5) years, and may be subject to extension by mutual consent of the Parties, expressed in writing.

b) Either party may terminate this MoU by giving one-month advance notice in writing to the other Party.

c) The provisions of the MoU may be amended at any time with the mutual consent of the Parties in writing.

d) The amendment, termination and expiration of this MoU will not affect the terms of activities ongoing at the time of notification of amendment, termination and expiration, unless otherwise agreed upon between the Parties.

e) No action undertaken shall diminish the full autonomy of either institution, nor will either party impose any constraints upon the other in carrying out the agreement.

Article III: Special Provisions

a) During the term of this Memorandum each party may make any press release about the association between the parties.

b) During the term of this memorandum each party agrees to supply information to the other for inclusion in that party's promotional material and agrees

Memorandum of Understanding between MUJ and FCE CTU

Page 4 of 6

Sign MUJ

to such information being used in each other's promotional material in accordance with such terms as may be specified, but at no cost to the other.

c) Detailed modalities of individual forms of collaboration, activities associated with them and financial aspects of each shall be mutually agreed upon on a case by case basis, and specified, with all necessary details, in separate Agreements.

d) This MoU will not be legally & financially binding to any of the Parties. The two Parties will consult with each other and attempt to resolve disputes or misunderstanding that arises in the administration of this MoU or any subsequent associated Agreement informally.

e) Separate agreement shall be executed with regard to specific project/work initiated in furtherance of this MOU. Financial and other obligations of both the institutions shall be as per that agreement.

Article IV: Contact Persons

The Nodal officers for the said MOU from both the sides would be as follows

Name: Prof. Bhavna Tripathi Designation: Professor and Director, SCCE Email: <u>bhavna.tripathi@jaipur.manipal.edu</u> Phone:+91 9460383678 Manipal University Jaipur

Name: Prof. Ing. Petr Hájek, CSc. Designation: Head, Department of Architectural Engineering Email: <u>k124@fsv.cvut.cz</u>; petr.hajek@fsv.cvut.cz Phone: +420 739028773 Faculty of Civil Engineering, Czech Technical University in Prague

Memorandum of Understanding between MUJ and FCE CTU

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Page 5 of 6

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Signature: _	pury
Date:	2 6 710- 2022

Name: Prof. Ing. Jiří Máca, CSc.

Designation: Dean

Contact Details: +42022435 8777; +420 22435 4500

Email ID: maca@fsv.cvut.cz

Faculty of Civil Engineering, Czech Technical University in Prague, Czech Republic



	MD /
Signature	REGISTRAR
Date:	07/11/22

Name : Dr. Nitu Bhatnagar

Designation: Registrar

Contact Details: 0141 3999100 Extn - 102, 112

Email ID: registrar@jaipur.manipal.edu

Manipal University Jaipur, India



Memorandum of Understanding between MUJ and FCE CTU

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Page 6 of 6

Summary for Manipal University Jaipur 13

Manipal University Jaipur 2021 to 2023 🗸

Research performance within SDG 13: Climate Action (2023)

Entity: Manipal University Jaipur · Within: All subject areas (ASJC) · Year range: 2021 to 2023 · Data source: Scopus, up to 30 Oct 2024



Collaboration summary within SDG 13: Climate Action (2023) Entity: Manipal University Jaipur · Within: All subject areas (ASJC) · Year range: 2021 to 2023 · Data source: Scopus, up to 30 Oct 2024

International Collaboration

Publications co-authored with Institutions in other countries/regions



Manipal University Jaipur 24.2%

Academic-Corporate Collaboration

Publications with both academic and corporate affiliations

Manipal University Jaipur 0.0%

Top keyphrases within SDG 13: Climate Action (2023)

Entity: Manipal University Jaipur \cdot Within: All subject areas (ASJC) \cdot Year range: 2021 to 2023 \cdot Data source: Scopus, up to 30 Oct 2024

Top keyphrases by	relevance
	Greenhouse Gas
	Fossil Fuel
_	Energy Engineering
_	Gas Emission
	Climate Change
_	Carbon Footprint
_	Energy Efficiency
	Energy Conservation
_	Energy Demand
_	Renewable Energy
	Global Warming
	Emission Gas
	Solar Radiation
_	Solar Photovoltaic
_	Solar Panel

INDIAN CHEMICAL COUNCIL TALK

Prof. Abhishek Sharma, from the Department of Chemical Engineering at Manipal University, Jaipur, delivered an enlightening talk on "Energy and Carbon Sustainability under Circular Economy Framework" to the Indian Chemical Council on November 24, 2023. The virtual session, held from 3:30 pm to 5:00 pm, explored the intersection of circular economy principles with energy and carbon sustainability. Prof. Sharma emphasized the importance of adopting circular economy practices in the chemical industry to mitigate environmental impact and enhance resource efficiency. His presentation delved into innovative approaches, highlighting how circular economy frameworks can lead to reduced carbon emissions, efficient energy utilization, and sustainable resource management. The talk provided valuable insights for industry professionals and policymakers striving for a more sustainable and resilient future in the chemical sector.





GOVERNMENT OF INDIA Ministry of Science & Technology Department of Science & Technology DST/TMD-EWO/WTI/2K19/EWFH/2019/102 (G)/2 Terms & Conditions

1. The grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report (Vis-a-Vis Target Vs-Achievement) at the end of each financial year duly reflecting the interest earned / accrued on the grant received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization report within one year from the scheduled date of completion of the project.

2. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

3. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the released Capital head grant.

4. The grant-in-aid being released is subject to the condition that:-

effect will be submitted by the Grantee organization immediately on receipt of the grant. b) While submitting Utilization Certificate/Statement of Expenditure, the organization has to be ensure submission of supporting documentary evidences with regard of the purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.

5. As per the GFR 2017 Rule 230 (8) the Grantee Institute should ensure that all the interests or other earnings against Grant-in-Aid or advances (other than reimbursement) released to any Grantee institution should be mandatorily remitted to the Consolidated Fund of India immediately after finalization of the accounts. Such advances will not be allowed to be adjusted against future releases.

6. As per the GFR 2017 Rule 230 (17) "the Grantee Institute should agree to make reservations for Scheduled Castes and Scheduled Tribes or OBC in the posts or services under its control on the lines indicated by the Government of India"

7. The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. www.bharatkosh.gov.in), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure/ Utilization Certificate for considering subsequent release of Grant/Closure of Project accounts.

8. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

9. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial

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Rules 2017.

10. Due acknowledgement of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publication / media release as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

11. Failure to comply with the terms and conditions of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

12. It is mandatory to use EAT module in PFMS, failing which no further funds shall be released.

13. Goods (Consumable/Equipment) available in GeM portal are to be procured mandatorily online through GeM only as per the provisions of Rule 149 of GFR.

14. The Grantee Institute should follow Global Tendering Enquiry (GTE) conditions as per Department of Expenditure ID Note No:4/1/2021-PPD dated 10.09.2021.

15. If One time assistance or non-recurring grant as Grant-in-Aid for Rs. 10.00 lakhs to Rs. 50.00 lakhs, it should be included in the Annual Report of the Institute.

16. The Grantee Institute must ensure any other provisions of GFR-2017 and guidelines/amendments issued from Govt. of India from time to time.



भारत सरकार विज्ञान और प्रौद्योगिकी मंत्रालय विज्ञान और प्रौद्योगिकी विभाग DST/TMD-EWO/WTI/2K19/EWFH/2019/102 (G)/2 निबंधन और शर्ते

1. अनुदानग्राही संस्थान प्रत्येक वित्त वर्ष के अंत में इस परियोजना के अंतर्गत प्राप्त अनुदान पर अर्जित/प्रोद्भूत ब्याज को विधिवत रूप से दर्शाते हुए अद्यतन प्रगति रिपोर्ट (लक्ष्य बनाम उपलब्धि) के साथ जीएफ आर 2017 में विनिर्दिष्ट प्ररूप में वित्तीय वर्ष-वार उपयोग प्रमाण पत्र (यूसी) और व्यय का लेखापरीक्षित विवरण (एसई) विज्ञान वीनिर्दिष्ट प्ररूप में वित्तीय वर्ष-वार उपयोग प्रमाण पत्र (यूसी) और व्यय का लेखापरीक्षित विवरण (एसई) विज्ञान और प्रौद्योगिकी विभाग को प्रस्तुत करेगा। यह परियोजना की समाप्ति की निर्धारित तारीख से एक वर्ष भीतर व्यय और प्रौद्योगिकी विभाग को प्रस्तुत करेगा। यह परियोजना समाप्ति रिपोर्ट प्रस्तुत करने की शर्त के भी अध्यधीन है। का अंतिम विवरण, उपयोग प्रमाण-पत्र और परियोजना समाप्ति रिपोर्ट प्रस्तुत करने की शर्त के भी अध्यधीन है।

2. अनुदानग्राही संस्थान को उपयोग प्रमाण-पत्र इस प्रभाग में भौतिक रूप में भेजने के साथ-साथ पीएफ़एमएस पोर्टल पर प्रविष्ट और अपलोड करना होगा। अनुवर्ती/अंतिम किस्त प्रभाग द्वारा यूसी की स्वीकृति की पुष्टि और पीएफ़एमएस में पूर्ववर्ती उपयोग प्रमाण-पत्र की प्रविष्टि के बाद ही जारी की जाएगी।

3. यदि अनुदान एक ही परियोजना के अंतर्गत उपस्कर (रों) की खरीद के लिए पृथक संस्वीकृति आदेश के माध्यम से पूंजी-शीर्ष के अंतर्गत जारी किया गया है तो जारी किया गया पूंजी-शीर्ष अनुदान के लिए पृथक एसई/यूसी प्रस्तुत करना होगा।

4. जारी किया जा रहा सहायता अनुदान निम्नलिखित शर्तों के अध्यधीन है-

क) उपर्युक्त परियोजना के लिए संस्वीकृत पूंजी आस्तियों की खरीद करते समय अनुदानग्राही संस्थान के उचित नियमों के तहत संस्थान/संगठन द्वारा सामान्य वित्तीय नियमावली 2017 के उपबंधों के अनुरूप पारदर्शी खरीद प्रक्रिया का अनुपालन किया जाए और अनुदान प्राप्ति पर तुरंत प्रभाव से अनुदानग्राही संगठन द्वारा इस

आशय का प्रमाण-पत्र प्रस्तुत किया जाए। ख) उपयोग प्रमाण-पत्र/ व्यय विवरण प्रस्तुत करते समय, संगठन को जीएफ़ आर 2017 के उपबंधों के अनुसरण में उपस्कर/पूंजी आस्तियों की खरीद के संबंध में संबन्धित दस्तावेज़-साक्ष्य प्रस्तुत करना सुनिश्चित करना होता है।

5. जीएफ़ आर नियमावली 2017 के नियम 230 (8) के अनुसार अनुदानग्राही संस्थान को सुनिश्चित करना चाहिए कि किसी भी अनुदानग्राही संस्थान को जारी किए गए सहायता अनुदान या अग्रिम (प्रतिपूर्ति से भिन्न) पर प्राप्त कि किसी भी अनुदानग्राही संस्थान को जारी किए गए सहायता अनुदान या अग्रिम (प्रतिपूर्ति से भिन्न) पर प्राप्त समस्त प्रकार के ब्याज या अन्य आय को लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में अनिवार्य रूप से विप्रेषित किया जाए। ऐसे अग्रिमों को भविष्य में जारी की जाने वाली निधियों में समायोजित करने की अनुमति नहीं दी जाएगी।

6. जीएफ़आर नियमावली 2017 के नियम 230 (17) के अनुसार, "अनुदानग्राही संस्थान को भारत सरकार के निर्देशानुसार अपने नियंत्रणाधीन पदों या सेवाओं में अनुसूचित जाति या अनुसूचित जनजाति या ओबीसी के लिए आरक्षण रखने पर सहमत होना चाहिए।"

7. अनुदानग्राही संस्थान परियोजना का पृथक परीक्षित लेखा रखेगा और अनुदान की समस्त राशि बैंक खाते में सब्याज रखी जाएगी। वित्तीय वर्ष 2017-18 के दौरान और उसके बाद जारी अनुदान के लिए. अनुदान के लिए सभी प्रकार के ब्याज या अन्य आय ऐसे लेखों को अंतिम रूप दिए जाने के तुरंत बाद भारतीय समेकित निधि में 2/24/23, 2:55 PM

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(गैर कर प्राप्ति पोर्टल (एनटीआरपी) अर्थात www.bharatkosh.gov.in के माध्यम से) विप्रेषित की जाएगी, क्योंकि यह राशि भविष्य में जारी की जाने वाली राशि में समायोजित नहीं की जाएगी। अनुवर्ती अनुदान के निर्गम/ परियोजना ख़ाते को बंद करने पर विचार किए जाने के लिए, व्यय विवरण/ उपयोग प्रमाण-पत्र के साथ इस आशय का प्रमाण पत्र प्रस्तुत करना होगा।

8. डीएसटी, अनुदान से सृजित परिसंपत्तियों पर एकमात्र सुरक्षित अधिकार रखता है। सरकारी अनुदानों से पूरी तरह से या पर्याप्त रूप से अर्जित संपत्ति (जीएफआर 2017 में निर्धारित प्रक्रिया के अनुसार अप्रचलित और अनुप्रयोज्य, अनुपयोगी घोषित अनुदानों से इतर), का निपटारा डीएसटी का पूर्व अनुमोदन प्राप्त किए बिना नहीं किया जाएगा।

9. जैसा कि सामान्य वित्तीय नियमावली 2017 के नियम 236 (1) के तहत निर्धारित किया गया है, अनुदानग्राही संगठन का लेखा स्वीकृति प्रदाता प्राधिकरी और लेखा परीक्षक (भारत के नियंत्रक एवं महालेखापरीक्षक और डीएसटी के प्रधान लेखा कार्यालय दोनों द्वारा आंतरिक लेखा परीक्षा) द्वारा निरीक्षण किए जाने, जब भी संगठन को ऐसा करने के लिए कहा जाता है, हेतु अभिगम्य होगा।

10. इस परियोजना अनुदान से प्राप्त तकनीकी सहायता/वित्तीय सहायता की उचित पावती को अनुदानग्राही संगठन द्वारा सभी प्रकाशनों/मिडिया प्रकाशनी में मोटे अक्षरों में और परियोजना के पूरा होने के दौरान और तदुपरांत उनकी वार्षिक रिपोर्टों के शुरुआती पैराग्राफों में अनिवार्य रूप से दिखाया किया जाना चाहिए।

11. बॉन्ड के नियमों और शर्तों का पालन करने में असफल होने पर जीएफआर 2017 के नियम 231 (2) के अनुसार पूरी राशि सब्याज वापस करनी होगी।

12. पीएफएमएस में ईएटी मॉड्यूल का उपयोग करना अनिवार्य है, ऐसा न करने पर अन्य कोई भी आगामी निधि जारी नहीं की जाएगी।

13. जीएफआर के नियम 149 के उपबंधों के अनुसार जीईएम पोर्टल पर उपलब्ध वस्तुओं (उपभोज्य वस्तु / उपस्कर) का अनिवार्यतया आनॅ लाइन प्रापण जैम (जीईएम) ही के माध्यम से किया जाना है।

14. अनुदान ग्राही संस्थान को व्यय विभाग के आईडी नोट संख्या: 4/1/2021-पीपीडी दिनांक 10.09.2021 के अनुसार वैश्विक निविदाकरण जांच-पड़ताल (जीटीई) नियमों का पालन करना चाहिए।

15. यदि एकबारगी सहायता या गैर-आवर्ती अनुदान 10.00 लाख रुपये से 50.00 लाख रुपये के सहायता अनुदान का हो तो इसे संस्थान की वार्षिक रिपोर्ट में दर्ज किया जाना चाहिए।

16. अनुदान ग्राही संस्थान को जीएफआर-2017 के किसी भी अन्य उपबंध और समय-समय पर भारत सरकार द्वारा जारी दिशा-निर्देश/संशोधन का अनुपालन सुनिश्चित करना चाहिए।

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GOVERNMENT OF INDIA Ministry of Science & Technology Department of Science & Technology DST/TMD/EWO/WTI/DM/2021/20 (G) (Technology Mission Division)

Technology Bhawan, New Delhi Dated: 23/02/2023

Sanction Order

Subject: Financial assistance for the project entitled "Providing low cost solution and appropriate management framework for the reject disposal of Community-based RO Plants in many areas of Rajasthan" submitted by Dr. Monika Sogani, MANIPAL UNIVERSITY JAIPUR, DEHMI KALAN, OFF JAIPUR-AJMER EXPRESSWAY, BAGRU-JAIPUR, 303007 Release of the first installment regarding

Sanction of the President is hereby accorded to the approval to the above mention project at a total cost of Rs. 82,48,118/-(Rupees Eighty Two Lakh Forty Eight Thousand One Hundred Eighteen only) for a duration of 3 Years Days. The detailed breakup of the grant for General as well as Capital Components are given below:-

General Component : ₹ 73,58,118/-Capital Component : ₹ 8,90,000/-

	(All Institute) Budget Summary (in Rs.)			
	Vagr-1	Year-2	Year-3	Total
Items	Itai I	And the second se		
1- Non-Recurring	80000	0	0	80000
Electronic TDS Meter-1 Unit - 1	80000	0	0	250000
Dissolved Oxygen Meter-1Unit - 1	250000	0	0	300000
Chlorophyll Meter-1Unit - 1	300000	0	0	100000
Magnetic stirrer (10 plate)- 1 Unit - 1	100000	0	()	60000
Laptop-1 Unit - 1	60000	0	0	100000
Water analyser-1 Unit - 1	100000	0	0	890000
Subtotal (Capital)	890000	0	0	
2- Recurring			1161120	3370080
Project Staff	1104480	1104480	1101120	
Junior Research Fellow (JRF)-1 ((@ 31,000/- + 18% HRA (For 1st & 2nd Year & SRF 25,000/_+18% HRA for 3rd year)	438960	438960	495600	1373520
Research Associate-II-1 ((@ 47000/-+ 18%	665520	665520	665520	1996560
HRA for full three years))	200000	125000	50000	375000
Consumables	150000	100000	50000	300000
Contingency	250000	175000	150000	575000
Travel	248669	198669	190700	638038
Overhead Other Cost-(fabrication of Lab Scale CW- MDC Unit and its Operation, fabrication of Culture Cabinet, Designing and Construction of Pilot Scale CW-MDC unit of Cement Concrete, Operation & maintenance and various testing cost of Pilot Scale CW-MDC unit, Outsourcing and Stakeholders workshop organization for dissemination of key findings and knowledge generated)	500000	600000	600000	1700000
Other Cost-(Membrane development for CW- MDC using agro based material,	400000			

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Development of agro based PNSB			2201820	7358118
absorbent, Outsourenig)	2853149	2303149	2201820	1000
Subtotal (General)		0000140	2201820	8248118
Total Project Cost (Cap.+ Gen.)	3743149	2303149	2201020	

1 MANIPAL UNIVERSITY JAIPUR (Dr. Monika Sogani)

	Budget Summary (in Rs.)			
	Year-1	Year-2	Year-3	Total
Items				(0000
1- Non-Recurring	60000	0	0	60000
Laptop-1 Unit - 1	300000	0	0	300000
Chlorophyll Meter-1Unit - 1	250000	0	0	250000
Dissolved Oxygen Meter-1Unit - 1	230000	0	0	80000
Electronic TDS Meter-1 Unit - 1	80000	0	0	100000
Magnetic stirrer (10 plate)- 1 Unit - 1	100000	0	0	790000
Subtotal (Capital)	790000	0		
2- Recurring		665520	665520	1996560
Project Staff	665520	003520		1996560
Research Associate-II-1((@ 47000/-+ 18%	665520	665520	665520	1770000
HRA for full three years))	100000	75000	50000	225000
Consumables	100000	50000	50000	150000
Contingency	50000	100000	100000	350000
Travel	150000	140052	146552	442156
Overhead	146552	149052		
Any Other (Other Cost)-(fabrication of Lab Scale CW-MDC Unit and its Operation, fabrication of Culture Cabinet, Designing and Construction of Pilot Scale CW-MDC unit of Cement Concrete, Operation & maintenance and various testing cost of Pilot Scale CW- MDC unit, Outsourcing and Stakeholders workshop organization for dissemination of	500000	600000	600000	4863711
key findings and knowledge generated)	1612072	1639572	1612072	4003/1
Subtotal (General)	2402072	1639572	1612072	5653/1
Total Project Cost (Cap.+ Gen.)				

2 UNIVERCITY OF RAJASTHAN (Dr. Placheril John)

	Budget Summary (in Rs.)			
	Vegr-1	Year-2	Year-3	Total
Items	ICAN -			
1- Non-Recurring		0	0	100000
Water analyser-1 Unit - 1	100000	0	0	100000
Subtotal (Capital)	100000	0		
2- Recurring		128060	495600	1373520
Project Staff	438960	438960	192000	
Junior Research Fellow (JRF)-1((@ 31,000/- + 18% HRA (For 1st & 2nd Year & SRF	438960	438960	495600	1373520
35,000/- +18% HRA for 3rd year)		50000	0	100000
Consumables	50000	50000	0	100000
Contingency	50000	50000	25000	125000
Traval	50000	50000	23000	135882
	47117	47117	41648	183440
Overhead	636077	636077	562248	1034402
				101/1/1

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3 KASHI INSTITUTE OF TECHNOLOGY (Mr. Kumar Sonu)

		Budget Sum	mary (in Rs.)	
Items	Year-1	Year-2	Year-3	Total
1- Non-Recurring			,	
Subtotal (Capital)	0	0	0	
2- Recurring				
Consumables	50000	0	0	50000
Contingency	50000	0	0	50000
Travel	50000	25000	25000	100000
Overhead	55000	2500	2500	60000
Any Other (Other Cost)-(Membrane development for CW- MDC using agro based material, Development of agro based PNSB absorbent, Outsourcing)	400000	0	0	400000
Subtotal (General)	605000	27500	27500	660000
Total Project Cost (Cap.+ Gen.)	605000	27500	27500	660000

2. The sanction of the President is also accorded to the release of Rs. 28,53,149/- (Rupees Twenty Eight Lakh Fifty Three Thousand One Hundred Forty Nine only) to the "Director/Registrar/Principal/Controller/Comptroller, MANIPAL UNIVERSITY JAIPUR" being the first installment of grant as mentioned above table under "General Component" for the above mentioned project.

3. The expenditure involved is debitable to Demand No. 89, Department of Science & Technology for the year 2022-23:

3425	Other Scientific Research(Major Head)	
3425.60	Others : (Sub-Major Head)	
3425.60.200	Assistance to Other Scientific Bodies(Minor Head)	
3425.60.200.70	Innovation, Technology Development and Deployment	
3425.60.200.70.00	Detailed Head	
3425.60.200.70.00.31	Grants-in-aid General	
	(Previous: 3425.60.200.26.01.31)	

4. The amount of Rs. 28,53,149/- (Rupees Twenty Eight Lakh Fifty Three Thousand One Hundred Forty Nine only) will be drawn by DDO, DST and disbursed to the "CNA account of Autonomous body SERB in respect of Innovation, Technology Development and Deployment Scheme".

Name of A/C Holder	Innovation Technology Development and Deployment
Bank A/C No	349902010051240
Name of the Bank & branch	Union Bank of India, Safdarjang Enclave - New Delhi
RTGS/IFSC code	UBIN0534994

5. The amount of Rs. 2853149/- (Rupees Twenty Eight Lakh Fifty Three Thousand One Hundred Forty Nine only) will be drawn by the "CNA account of Autonomous body SERB and will be disbursed to the Director/Registrar/Principal/Controller/Comptroller, MANIPAL UNIVERSITY JAIPUR. The bank details for electronic transfer of funds through RTGS are given below:-

Name of A/C Holder	MANIPAL UNIVERSITY JAIPUR	
Bank A/C No	219012010000703	
Name of the Bank & branch	Union Bank of India	
RTGS/IFSC code	UBIN0821900	

6. As per Rule 234 of GFR 2017, the sanction has been entered at S. No 200. in the register of grants maintained in the Technology Mission Division for the scheme WTI Call 2021 on Desalination Technologies.

7. This issues with the concurrence of IFD vide their Concurrence Dy. No. IFD/C/III/170223/31/03435 dated 17/02/2023.

8. The GI will keep all the funds received in the Central Nodal Account only and shall not transfer the funds to any other account or not divert the same to Fixed Deposits/ Flexi-Account/ Multi-Option Deposit Account/ Corporate Liquid Term Deposit (CLTD)

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account etc. The funds released to GI shall not be parked in bank account of any other agency.

9. The GI will ensure the compliance of OM. No. F. No. 1/(18)/PFMS/FCD/2021 dated March 9, 2022 of Department of Expenditure, Ministry of Finance.

10. Out of the release of Rs. 28,53,149 / - (G) (Rs. 16,12,072/- for Manipal University Jaipur, (Darpan ID-RJ/2017/0115730), Rs. 6,36,077/- for University of Rajasthan and Rs. 6,05,000/- for Kashi Institute of Technology (Darpan ID-UP/2017/0152961)under the recurring head and out of release of Rs. 8,90,000/-(C) (Rs. 7,90,000/-(Manipal University Jaipur)) and Rs.1,00,000/- (University of Rajasthan, Jaipur) towards the First-year installment.

11. This sanction order is subject to the Terms & Conditions as annexured .

Dr. Sanjai Kumar (Scientist - 'D') sanjai.k@gov.in

The Pay & Accounts Officer, Department of Science & Technology, New Delhi – 110 016.

Copy of information and necessary action to:

1. The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, I.P. Estate, New Delhi.

 The Financial Advisor, Integrated Finance Division, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016

3. The Internal Audit Wing, Department of Science & Technology, Technology Bhavan, New Mehrauli Road, Block C, Qutab Institutional Area, New Delhi, Delhi 110016

4. Drawing and Disbursing Officer, DST, Cash Section. (two copies)

5. Dr. Monika Sogani, Associate Professor Senior Scale, Department of Biosciences, MANIPAL UNIVERSITY JAIPUR, Dehmi Kalan. Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan - 303007

6. Dr. Placheril John, Professor and Head, Department of Zoology, UNIVERCITY OF RAJASTHAN, Jaipur, Jaipur, Rajasthan - 302004

7. Mr. Kumar Sonu, Assistant Professor, HoD, Mechanical Engineering, KASHI INSTITUTE OF TECHNOLOGY, Varanasi, Varanasi, Uttar Pradesh - 221307

8. The Director/Registrar/Principal/Controller/Comptroller, KASHI INSTITUTE OF TECHNOLOGY, Varanasi, Varanasi, Uttar Pradesh - 221307

9. The Director/Registrar/Principal/Controller/Comptroller, MANIPAL UNIVERSITY JAIPUR, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, Rajasthan - 303007

10. The Director/Registrar/Principal/Controller/Comptroller, UNIVERCITY OF RAJASTHAN, Jaipur, Jaipur, Rajasthan - 302004

11. Secretary, SERB, New Delhi (for allocation of limits to implementing agency)

12. Head (Technology Mission Division) DST

13. Sanction Folder (Technology Mission Division)

Dr. Sanjai Kumar (Scientist - 'D') sanjai.k@gov.in