S.No.	Area - Social Impact	Status as on 31-12-2020
1	Land-Atmosphere Interaction over India and Its Surroundings in CFSv2: Impact on the onset	
	phase and extended range forecasting	
2	Creation of irrigation facility, Sukma	
3	Structural analyses, designs and drawings of RCC multi-Storey buildings	
4	Topographical survey and Geotechnical Investigation at AP High Grade Steels Limited	
5	Research in the areas of children food security, community participation, elimination of	
	malnutrition, food security policy development and advocacy	1
6	The Decentralized Wastewater Treatment	
7	Environmental Impact Assessment of the KC-Valley Project	
8	Ultra-capacitor assisted smart and scalable sub-microgrid with distributed generation	
9	Design and development of traction motor controller for electric, hybrid and fuel cell vehicle	
10	Role of tumor suppressor microRNA-6741-3p in oral squamous cell carcinoma	
11	IoT and AI Enabled Traffic Sensing and Modelling	
12	Risk Assessment of moraine – dammed glacier lakes due to climate change	
13	Understanding influence of climate change on small hydropo	wer projects in Himachal
	Pradesh, India	
14	Strengthening the Existing DST Centre of Excellence in Climate Change	
15	Cancer Development & progression	
16	Role of Tumor Suppressor microRNA-6741	
17	Life-cycle Assessment (LCA) of Vehicle	
18	In-cellulo & in- vivo imaging of gut	
19	Large Area Soft Bio Compatible Photonic	
20	Experimental investigation of supercritical material	
21	Development of graphene CNT-BN based	
22	Kerala Floods 2018 - A comprehensive study on flood management	
23	Contributions to the website development by TIFR and IISc about COVID Gyan	
24	Dealing with Uncertainty in Academia during COVID 19	
25	Deciphering collagen mediated signaling pathways in platele	t adhesion, activation and
26	intravascular thrombosis	
26	Low-cost electronic control for medical grade ventilator	
27	Characterising the dynamics of the receptor binding domain	C ·
28	Development of stem immunogens for a broadly protective i	
29	Regulation of information encoding and routing in the brain l	by neuronal and network
20	components	
30	COVID-19 Workplace Readiness Indicator - an online self-asso	•
21	organizations evaluate their readiness to operate amidst the	
31	Training program in nanotechnology for medical professional	
32	Development of automatic fire detection system indigenousl	y, which is currently being used
33	in armoured fighting vehicles	ctn
	Emerging technologies – IOT and 3D printing- for Indian industry  Imaging of droplet spread in a room that is critical to understanding how the virus laden	
34	aerosol spreads in confined spaces	anding now the virus iddefi
35	Development of Home-made setup to test efficiency of the N	195 masks
	Development of Home-made setup to test efficiency of the N  Development of 4 versions of ventilator prototypes in coordi	
36	Development of 4 versions of ventilator prototypes in coordi	nation with iviallipal nospitals

37	Design and development of low-pressure aerospace-grade MEMS pressure sensors	
	reconfigured to cater to the requirements of the CeNSE ventilator team	
38	Development of Oxygen sensors for medical grade ventilators	
39	Study on standard reading, fluency measures, and visual processing of letters in children	
	reading Kannada alphabets	
40	microRNAs in oral cancer: Moving from bench to bed as next generation medicine	
41	Newly discovered functions and roles in human health and diseases	
42	Development and launch of Mobile Infection Testing and Reporting (MITR) labs	
43	Raised CSR funds for covid testing facility in IISc	
44	Raised funds from IBM for inculcating STEM education in high school students	
45	Whatsapp Chatbot for Fake News Detection	
46	Ten programmes on creating awareness about climate change	
47	Three programmes on monitoring the evolution of air pollution	
48	Three programmes on identifying sources of water pollution	
49	Two programmes on impact of glacier retreat on water availability in Himalayas	
50	Three programmes on creating awareness about renewable energy	
51	Elucidation of pharmacology and mechanism of chronic pain inhibitors of neurotransmitter	
	transporters	
52	Screening and isolation of Indian camelid antibodies as crystallization chaperones	
53	Identification of mechanisms underlying promiscuity of multi-drug efflux transporters in	
	antimicrobial resistance	
54	Structural and mechanistic studies to understand SARS-CoV-2 ingress into human cells and its	
	therapeutic intervention	
55	Structure, functions and activation of bacterial type III toxin-antitoxin complexes	
56	A project to screen for lead drug molecules against human diseases has been initiated with	
	Jubilant Biosys Ltd Bangalore	
57	A project for screening of lead drug molecules to identify immune check point inhibitors is	
	currently under discussion with Auregene Drug Discovery Technologies	
58	Eye gazed controlled robotic arm	
59	A 5.2 KW solar powered microgrid installed in a primary health centre	
60	Providing technical designs and operation modifications for the K & C valley STP to improve	
	their operations so as to meet the latest (very stringent) effluent discharge standards	
61	Review of 20 STPs of BWSSB to ensure that the effluent meets the latest effluent discharge	
	standards	
62	Environmental impact assessment study of the K & C valley project in which 138 tanks are	
	getting filled with secondary treated wastewater for indirect recharge of ground water	
63	Periodic wastewater quality analysis of the STP to ensure that the STP operations are	
	improved	
64	Design vetting of the entire waste water lift hydrology including selection of inner lining of	
65	the pipelines and surge protection	
65	Testing of effluent water quality parameters and analysis to show that the generated water	
	meets the available effluent discharge standards	
66	Development of Scalable superconducting processor and control hardware for active	
C7	feedback measurements	
67	Compact, conformal scanning probe microscopy: Development and applications for multi-	
	parameter characterisation of nanomaterials	

68	Developed India's first metal 3D printing machine based on electronic beam melting	
	technology	
69	Indigenous software product for IP management developed	
70	Smart Factory to explore how to use technologies such as IoT & analytics to empower human	
	labour inaugurated	