



SDG 17



Strengthen the means of implementation and revitalize the global partnership for sustainable development



प्रज्वला ऑफ़ दु ईयर

2023

आपको सादर प्रदान किया जाता है

सुश्री झुमा सुनुवार

प्रशस्ति पत्र

झुमा सुनुवार एक बहुत प्रभावशाली व्यक्तित्व की महिला हैं। आपका खुशमिज़ाज़ स्वभाव और प्रगतिशील विचार सभी को अपनी ओर आकर्षित करतL है। आपका कभी हार न मानने वाला जज़्बा और मजबूत इच्छा शक्ति आपको दूसरों से अलग बनाते हैं। झुमा पिंकिश फाऊंडेशन के साथ पिछले 4 सालों से भी अधिक समय से जुड़ी हुई हैं और निरंतर अपना समर्थन प्रदान कर रही हैं। आप एसएमआईटी सिक्किम में ASTT प्रोफेसर के रूप में काम करती हैं। अनेक कठिनाइयाँ होने के बावजूद भी झुमा की जोश भरी सोच, जिसमे वे एक समृद्ध समाज की कल्पना करती है, उन्हें आगे बढ़ने के लिए प्रेरित करती है। आपका समर्पण और काम के प्रति जिम्मेदारी का भाव प्रशंसनीय है।आपके सक्षम नेतृत्व के तहत, पिंकिश फाउंडेशन की सिक्किम शाखा महिलाओं और लड़िकयों को MENSTRUAL HEALTH AND HYGIENE विषय पर निरंतर जागरूक करना और सैनिटरी पैड वितरण का कार्य निरंतर कर रही है। आपका निःस्वार्थ काम सिक्किम में सैकड़ों महिलाओं के जीवन में साकारात्मक बदलाव ला रहा है।झुमा, हम आपके कार्यों को सराहते हुए और पिंकिश में आपके योगदान का सम्मान करते हुए आपको प्रज्वला ऑफ़ THE ईयर अवार्ड से सम्मानित करते हैं।

अनंत शुभकामनाओं सहित

शालिनी गुप्ता सेक्रेटरी जनरल पिंकिश फाउंडेशन



Cross sectoral dialogue about SDGs

HEALTH AND FAMILY WELFARE DEPARTMENT GOVERNMENT OF SIKKIM GANGTOK, SIKKIM

No:

193 /H& FW/PDHS/2019

Dated: 10/09/2019

To.

The Principal, Nursing College, CRH, Tadong.

Sub: Nomination of a representative to help formulate the State Action Plan for Antimicrobial Resistance Containment Programme.

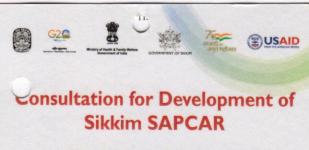
Respected Sir,

Antimicrobial Resistance has become a notional priority for the Government of India and the National Action Plan on Antimicrobial Resistance was endorsed in New Delhi on19th April. A key feature of the National Action Plan is to strengthen the States Commitment and Collaboration on Antimicrobial Resistance (AMR).

All the states have been directed by the Ministry of Health and Family Welfare to design their State Action Plan for Containment of Antimicrobial Resistance (SAPCAR). In order to formulate the SAPCAR identification of key stakeholders is necessary.

Nursing College, CRH has been identified as important stakeholders for containment of AMR. For this purpose, kindly nominate an Officer from your department to help us with the same.

The name, email id and phone number of the persons may kindly be intimated to the undersigned at the earliest. Individual letters have been sent to the respective HODs as mentioned above.



Organized by the Government of Sikkim in collaboration with NCDC-DGHS, MoHFW, GoI and USAID's IDDS project

Date: April 25-26, 2023

Venue: Hotel Denzong Regency, Gangtok

Prof. Binita Khati

Yours Sincerely,

Dr. Uttam Pradhan, Principal Director-I

SIKKIM STATE AIDS CONTROL SOC

Gangtok, East Sikkim - 737 101

Memo No.	· SSACS	P-II	502/	NGO	6	2007
INICITIO TAO.	. ***********					

Date: 2 8 2022

To

Cikkim Manipal Institute of Medical Sciences, 5th Mile, Jadong, Gongtok

Sub: - Meeting of State Steering Committee reg.

Respected,

Sir/Madam,

Greetings from Sikkim SACS,

This is to inform you that Sikkim State AIDS Control Society (SSACS) is organizing a meeting for the State Steering Committee for the discussion of the update on Programmatic Mapping & Population Size Estimation (PMPSE) exercise for the High Risk Group of population i.e. Injecting Drug Users, Commercial Sex Workers, MSM, 1G etc. in the state. Therefore, in this regard you are kindly requested to depute one representative from your department/organization for the above meeting to provide your valuable suggestion and feedback please.

Date: 04/08/2022

Time: - 11:00 a.m.

Venue: SSACS Office – (PD's Chamber), New STNM Hospital Complex, Sochakgang Gangtok.

Thanking You

Dochenla to please atm

Yours Sincerely

K.P. Sharma

Assistant Director (TI)

K. P. Sharma Assistant Director (Ti) Silddim State AIDS Control Society Gangtok, Slkkim

8-12

Email: sikkimsacs@gmail.com, Website: sikkimsacs.org (M) 9832460744.



International collaboration data gathering for SDG

TMA Pai University Research Seed Grant - Major 2020-21

Sanction Letter

- 1. The University Research Committee (URC) is pleased to offer a sanction letter of Rs. 10.00 lacs (one time research grant) for the project titled "A study on the Aspects related with Latent Tuberculosis Infection among the Ethnic Races of Sikkim, India: an ALTER study (focusing on the contact groups)" for period of two years from the date of sanction.
- 2. Principal Investigator: Dr. Karma G. Dolma, Ph.D., Associate Professor, Department of Microbiology, SMIMS

Co-Investigators (Internal):

- a) Dr. Dechen C. Tshering, MD, Professor, Department of Microbiology, SMIMS
- b) Dr. Rinchen Bhutia, Ph.D. Assistant Professor, Department of Biochemistry, SMIMS
- c) Ms. Preety Choudhary, M.Sc., Research Assistant, Department of Microbiology, SMIMS

Co-Investigators (National): Dr. Tseten Y. Bhutia, State TB Officer/ Additional Director, Dept of Health and Family Welfare, Govt. of Sikkim.

Co - Investigators (International):

- a) Dr. Maria de Lourdes Pereira, Professor, Habilitation, CICECO-Aveiro Institute of Materials and Department of Medical Sciences, University of Aveiro, 3810-193, Averio, Portugal
- b) Dr. Chandramathi Samudi Raja, Senior Lecturer, Dept of Medical Microbiology, Faculty of Medicine, University of Malaya, Malaysia.

- c) Dr. Tooba Mahboob, Research Assistant, Dept of Parasitology, Faculty of Medicine, University of Malaya, Malaysia.
- Principal Investigator (PI) shall regularly submit the utilization report and present the progress as laid in the SoP of SMU TMA Pai Research Fund Management.

Ref. No.: 176/SMU/REG/TMAPURF/177/2020 Vice Chancellor, SMU

Date: 30 June 2020







MEMORANDUM OF AGREEMENT

AND

Universiti Malaya, a university established under the laws of Malaysia and having an address at Lembah Pantai, 50603 Kuala Lumpur, Malaysia, hereinafter referred to as "UM" (which expression shall where the context so admits include its successor and permitted assigns) of the OTHER PART; whereas SMU decided to support a project submitted by Department of Microbiology, SMIMS for the attainment of the objectives, hereinafter described in Annexure I annexed hereto; This Memorandum of Agreement (MoA) defines the role and responsibility of the participating agencies, monitoring and other matters related to the fulfilling of the objectives.

NOW THE SMIMS, SMU AND UM HERETO AGREE AS FOLLOWS: -

1.0 ROLE OF SIKKIM MANIPAL UNIVERSITY, SIKKIM, INDIA

To provide funds to the extent of 10 Lakhs over a period of two (2) years from the date of sanction of the project, to Department of Microbiology, Sikkim Manipal Institute of Medical Sciences (SMIMS) for undertaking the activity as detailed in the Annexure I including travel and training for Department of Microbiology, SMIMS, Sikkim, India. Details of the funds to be provided are given in Annexure II

2.0 ROLE OF SIKKIM MANIPAL INSTITUTE OF MEDICAL SCIENCES, SIKKIM

- 2.1 To be responsible for accomplishing objectives identified and activities listed.
- 2.2 To provide their contribution of scientific and administrative support for two (2) years from the date of sanction of project.
- 2.3 To prepare and submit all periodical reports and other documents that would be required by SMU.

- 2.4 To submit an annual audited statement of expenditures incurred under the project.
- 2.5 To ensure effective utilization of the grant given by SMU for the purpose of which it was granted and to ensure timely progress of project work.

3.0 ROLE OF UNIVERSITI MALAYA (UM)

- 3.1 To provide their contribution of scientific and administrative support for two (2) years from the date of sanction of project.
- 3.2 To ensure effective utilization of the grant given by SMU for the purpose of which it was granted and to ensure timely progress of project work.
- 3.3 To provide academic collaboration in terms of supervised trainings (if required), expert reviews on papers/projects, exchange student policy (PhD). Enhancing knowledge sharing and research collaboration among academics for a fruitful result.

4.0 DURATION OF PROJECT

Duration of the project shall be two (2) years from the date of sanctioned by SMU.

5.0 SELECTION OF STAFF

No extra staff is required for the project.

6.0 RIGHTS OF OWNERSHIP/TECHNOLOGY TRANSFER AND UTILIZATION

- 6.1 "Background Intellectual Property" means any Intellectual Property owned by the Parties prior to the commencement of this Agreement and which is made available by a party or Parties to carry out the collaboration program or achieve the Intended Project Outcomes.
- For the avoidance of doubt all Background Intellectual Property used in connection with the Project shall remain the property of the Party introducing the same. No Party will make any representation or do any act of that Party's Background Intellectual may be taken to indicate that it has any right, title or interest in or to the ownership or use of any of the Background Intellectual Property of the other parties except under the terms of this Agreement. Each Party acknowledge and confirms that nothing contained in this Agreement shall give it any right, title or interest in or to the Background Intellectual Property of the other Parties save as granted by this Agreement. The Parties agree that any improvements or modifications to a Party's Background Intellectual Property arising from the Project which are not severable from that Background Intellectual Property will be deemed to form part of that Party's Background Intellectual Property.
- 6.3 Each Party grants the other a royalty-free, non-exclusive licence for the duration of the Project to use its Background Intellectual Property for the sole purpose of carrying out the Project. No Party may grant any sub-licence over or in respect of the other's Background Intellectual Property.

- 6.4 Where any Project Intellectual Property is created or generated by two or more Parties jointly and it is impossible to segregate each Party's intellectual contribution to the creation of the Project Intellectual Property, the Project Intellectual Property will be jointly owned by those Parties in equal shares. The owners may take such steps as they may decide from time to time, to register and maintain any protection for that Project Intellectual Property, including filling and prosecuting patent applications for any Project Intellectual Property, and taking any action in respect of any alleged or actual infringement of that Project Intellectual Property. If one or more of the owners does not wish to take any such step or action, the other owner(s) may do so at their expense, and the owner not wishing to take such steps or action will provide, at the expense of the owner making the request, any assistance that is reasonably requested of it.
- 6.5 Each Party shall promptly disclose to the other(s) all Intellectual Property generated by it and each Party shall co-operate where required, in relation to the preparation and prosecution of patent applications and any other applications relating to Project Intellectual Property.
- 6.6 Each Party shall inform the other Parties promptly if it becomes aware of any infringement or potential infringement of the Background IP and/or Project Intellectual Property, and the Parties shall consult with each other to decide the best way to respond to such infringement.
- 6.7 If the Parties agree to jointly commence any infringement proceedings in respect of the Project Intellectual Property, all costs, charges and expenses of or incidental to or consequent upon such proceedings, shall be borne and paid by the Parties in proportion to their Intellectual Property share in the Project Intellectual Property, and all damages or other sums recovered in such proceedings shall also be divided among the Parties in proportion to their Intellectual Property share in the Project Intellectual Property after payment of all expenses in connection with arising out of the proceedings.
- 6.8 If any Party is unwilling to jointly participate in such infringement proceedings, such unwilling Party shall first obtain the consent of the remaining Parties ("Proceeding Parties") in the infringement proceedings, in which the said consent shall not be unreasonably withheld or delayed.
- 6.9 If such consent is given, the Proceeding Parties shall be allowed to use Party's name as co-claimant, and the Proceeding Party may at its own expense in all respects take proceedings and shall be solely entitled to all damages or other sums recovered, and to the full benefit of any judgement, but shall indemnify the other Party for any damages, costs, or penalty as may be awarded against the other Party or against the co-claimant, either jointly or severally.
- 6.10 Each Party is hereby granted an irrevocable, non-transferable, royalty-free right to use all Project Intellectual Property generated in the course of the Project for academic and research purposes.

7.0 CONFIDENTIALITY

- 7.1 "Confidentiality Information" means all information passing from the disclosing Party to the other Party relating to the Project including without limitation:
 - (i) Financial information, business plans, reports or findings, investigative studies, consultations, methodologies, proposals, systems, programs, course content, techniques, trade secrets, drawings, know how, source and object code, arrangements and agreements with third parties, formulae, concepts not reduced to material form, designs plans and models whether given orally or in writing;
 - (ii) Any derivations of any information or data which embodies, contains or describes the Confidential Information; and
 - (iii) Any other data or information designated by the disclosing Party to be confidential or relating to current or prospective activities or business of the disclosing Party.
- 7.2 Where the data and information of this Project have been designated as Confidential Information by any of the Parties, neither Party shall not inform, announce or disclose to any third party other than its respective authorities, any data and information obtained through the implementation of this Agreement or any result of it, unless written approval is obtained from the other Party.
- 7.3 Where result of this Project have been designated as Confidential Information by any of the Parties, neither Party will inform, announce or disclose to any third party other than its respective authorities, any result obtained through the implementation of this Agreement, unless written approval is obtained from the other Party.
- 7.4 Notwithstanding the generality of the foregoing, the receiving Party shall not disclose all or any part of such Confidential Information to any third party or make any use of the same (except for the purpose of performing its obligations under this Agreement) without the prior written consent of the disclosing Party.
- 7.5 The receiving Party agrees to restrict access to all Confidential Information within its organization to only such information in connection with the receiving Party's obligations or otherwise obligated to keep such information confidential and are instructed to neither use nor disclose such information in a manner other than as permitted herein.
- 7.6 The obligations of confidentiality contained in this Agreement shall not apply to any Confidential Information which:
 - Has been made public by the Disclosing Party or by others with the permission of the Disclosing Party;
 - (b) Is independently received from a third party who is free to disclose it,
 - (c) Is in the public domain or is a compilation of material in the public domain; or

- (d) Is required to be disclosed by order of court or any applicable government authority or under any applicable law.
- 7.7 Upon termination of this Agreement, the Receiving Party shall, upon the request of the Disclosing Party, return all Confidential Information (including all copies thereof) to the Disclosing Party or destroy the same on Disclosing Party's instructions, within thirty (30) days after the termination or expiration of the term of this Agreement, whichever is earlier.
- 7.8 The obligation of confidentiality under this Agreement shall survive the expiry or earlier termination of this Agreement for a period five (5) years.

8.0 MONITORING

- 8.1 The progress of implementation of the project and proper utilization of grant shall be reviewed by the Monitoring Committee set up by Sikkim Manipal University (SMU).
- 8.2 The periodic progress of physical achievement and utilization of funds, statement of expenditure shall be evaluated by the Monitoring Committee.
- The Sikkim Manipal University (SMU) may terminate the grant at any stage if it is convinced that the grant has not been properly utilized or appropriate progress has not been made. In the event, Sikkim Manipal University (SMU) terminates the grant, Department of Microbiology, Sikkim Manipal Institute of Medical Sciences (SMIMS) shall hand over all documents including technical details and equipment purchased related to the project.

9.0 TERM AND TERMINATION

- This Agreement shall, shall be effective on and after the date of its signing by the authorized representatives of both Parties and remain in force for a period of five (5) years., unless sooner terminated in accordance with the provisions of this Clause ("Term"). The Parties hereto may, however, extend the Term of this Agreement for additional periods as desired under mutually agreeable terms and conditions, which the Parties shall reduce to writing and sign.
- 9.2 This Agreement may be terminated at any time by by serving a written notice to the other Party at least three (3) months before the date of such termination.
- 9.3 If due to circumstances beyond its control UM is unable to fulfill its obligations under this Agreement, UM shall notify SMU immediately.
- 9.4 If either Party commits a breach be remedied. If the Party committing the breach does not remedy it within 30 days then the other Party may terminate this Agreement immediately without further notice.
- 9.5 The Parties agree that any Party may immediately terminate this Agreement by notice in writing to the other Party in the following circumstances:

- (a) The making or filing of any application to liquidate or wind up of a Party (other than for the purpose of reconstruction or amalgamation) under any law or government regulation relating to bankruptcy or insolvency whether by third party or by the Party itself.
- (b) The appointment of a receiver or administrator over all or substantially all of the property of the Party; or
- (c) The making by the Party of assignment or attempted assignment for the benefit of its creditors.
- 9.6 Any termination of this Agreement pursuant to Clauses 9.4 or 9.5 shall be without prejudice to the rights of the Party terminating to seek and obtain damages for any breach of this Agreement by the other Party.

10.0 DISPUTE SETTLEMENT

If there is a dispute between the Parties then:

- (a) The Parties must discuss the dispute initially with a view to settling the dispute amicably:
- (b) If the parties fail to settle the dispute within 14 days of the dispute arising, then
- (c) The Parties must refer the dispute for meditation to a person appointed by agreement between the Parties who has at least two years' experience as a mediator;
- (d) The parties must co-operate to the extent necessary to enable the mediator to mediate the dispute within 30 days of his or her appointment;
- (e) The fees of the mediator shall be paid by the Parties in the proportion determined by the mediator.
- (f) Referral of a dispute for mediation under Clause 10 does not prevent a party from taking proceedings in court in relation to this agreement after the referral and participation under Clauses 10 (b) and (c).

11.0 GENERAL

- 11.1 No party shall assign all or any of its rights hereunder without the prior written consent of the other Party.
- 11.2 No Party shall mortgage, pledge, charge, assign by way of security or otherwise encumber any of its rights hereunder without the prior written consent of the other Party.
- 11.3 This Agreement shall be read and construed according to the laws for the time being in force in the Malaysia, and subject to Clause 11 the Parties agree to submit any dispute which may arise in relation to this Agreement to the jurisdiction of the Courts of Malaysia.

- 11.4 This Agreement may not be varied except in writing signed by the Parties.
- Should any provision of this Agreement be held by a Court to be unlawful, invalid, and unenforceable or in conflict with any rule, statute, ordinance or regulation, the validity and enforceability of the remaining provisions shall not be thereby affected.
- Any notice under this Agreement shall be served by hand delivery or by being forwarded by A.R. Registered post to the address of the Party shown Annexure III to such other address as may be notified in writing by the Party from time to time and in the case of service by post shall be deemed to have been received within seven (7) days after posting. Such notices may be served by facsimile provided that confirmation is served by hand or post as described in this clause.
- 11.7 No servant or agents of any Party shall by virtue of this Agreement be deemed to be employees of the other Party.
- 11.8 Each Party shall execute such agreements, deeds and documents and do or cause to be executed or done all such acts and things as shall be necessary to given effect to this Agreement.
- 11.9 In this Agreement except to the extent that the context otherwise requires:
 - (a) words denoting the singular include the plural and vice versa;
 - (b) words denoting individuals or persons include bodies corporate and trusts and vice versa;
 - (c) heading are for convenience only and shall not affect interpretation;
 - (d) reference to any document or agreement includes reference to such document or agreement as amended, novated, supplemented, varied or replaced from time to time;
 - (e) words denoting any gender include all gender; and
 - (f) where any word or phrase is given a defined meaning in this Agreement any part of speech or other grammatical form in respect of such word or phrase has a corresponding meaning.
 - 11.10 Neither Party shall be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such Party, which causes such Party to be unable to perform its obligations under this Agreement, and which it has been unable to overcome by the exercise of due diligence. If any force majeure delays or prevents the performance of the obligations of either Party for a continuous period in excess of ninety (90) days the Party not so affected nay give notice to the affected Party to terminate this Agreement specifying the date on which termination will take effect.
 - 11.11 Time wherever mentioned in this Agreement shall be of the essence.

- 11.12 No Party shall use the name of the other Party in any advertising or other promotional material without the written permission of the other Party.
- 11.13 This Agreement shall be binding upon the Parties and their permitted legal assigns and successors-in-title by operation of law or otherwise.
- 11.14 This Agreement constitutes the entire agreement between the Parties. Any prior arrangements, agreements, representations or undertakings are hereby superseded.

12.0 COUNTERPARTS, EXECUTION

This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument. The Parties shall be entitled to rely upon delivery of an executed electronic copy of this Agreement, and such similar executed electronic copy shall be legally effective to create a valid and binding agreement between the Parties.

(THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK)

IN WITNESS THEREOF, the Parties have caused this MoU to be executed by their duly authorized representatives.

For and on behalf of

UNIVERSITI MALAYA

PROF. DR. APRIL CAMILLA ROSLANI

Dean, Faculty of Medicine

Date: 9 SEPTEMBER 204

For and on behalf of

SIKKIM MANIPAL UNIVERSITY

DR. KARMA SONAM SHERPA

Registrar

REGISTRAR SIKKIM MANIPAL UNIVERSITY 5TH MILE TADONG SIKKIM 737102

Date 16 SEPTEMBER 2021



Annexure I

- To diagnose for Latent Tuberculosis Infection (LTBI) among the contacts of tuberculosis cases (Pulmonary and Extra -Pulmonary Tuberculosis) in Sikkim using Tuberculin Skin Test (TST), Interferon Gamma Release Assay (IGRA) and RT-PCR.
- To further, evaluate for factors associated with the high-risk groups of tuberculosis patients.
- · To identify the co-morbidities associated with LTBI in these cases

Project Duration: The duration of the project is two (2) years from the date of issue of sanction order.

Annexure-II

BUDGET: Consolidated Budget (Rupees Lakhs)

Budget requirements (with detailed break-up and full justification):

S.No.	Item	1st Year	Total
1.	ELISA Reader	250000	250000

S.No.	Item	1st Year	Total
1.	IGRA Kits	250000	250000
2.	RT-PCR Kits	300000	300000
3.	HBA1C, AntiCCP test, Nutritional Assessment, tuberculin syringe, etc.	100000	100000
4.	Travel, conference, Publications	100000	100000
	Total	700000	700000

Collaboration for SDG best practice

International Collaboration

Active MoU with International Institutes & Organizations:

Sl No		Year of signing
	Name of the Institutes & Organisation	MoU
1	IARC WHO	2016-2017
2	"AUREL VLAICU" University of Arad, Romania	2017-2018
3	Backseok University(BU) Republic of Korea	2017-2018
4	College of Electrical Engineering and Computer Science (EECS), National Taipei	
	University of Technology (Taipei Tech), Taiwan.	2017-2018
5	The university of Padova	2018-2019
6	Jan Wyżykowski University, Poland	2018-2019
7	National Taipei University of Technology	2018-2019
8	Firma Polkowski Comp Expert,Poland	2018-2019
9	National Chin-Yi University of Technology, Taiwan	2021-2022
10	Malayer University, Iran	2021-2022
11	University Malaya	2021-2022
12	Intelligent Systems Lab, Duy Tan University, Viet Nam	2022-2023

Collaboration for SDG best practice

Publication on Indexed Journal with International Collaboration

SMU incentivize faculty members who published their work in Indexed Journal considering the SDGs with International Collaboration

SI	Authors	Source title	Volume	Issue	Art. No.	Affiliations	Document
No							Туре
1						Department of Mechanical Engineering, Sikkim	
						Manipal Institute of Technology, Sikkim	
						Manipal University, Sikkim, Majitar, India;	
		Journal of				Department of Production Engineering,	
	Das P.P., Chakraborty	Engineering and				Jadavpur University, West Bengal, Kolkata,	
	S.	Applied Science	69	1	35	India	Article
2		Intonational				Bioengineering Laboratory, Department of	
	Sharma A., Verma C.,	International Journal of				Textile and Fiber Engineering, Indian Institute	
	Mukhopadhyay S.,		216			of Technology, New Delhi, 110016, India;	Article
	Gupta A., Gupta B.	Biological Macromolecules				Sikkim Manipal Institute of Medical Sciences,	
		Macromolecules				Tadong, Gangtok, Sikkim 737102, India	
3						Narula Institute of Technology, 81, Nilganj	
						Road, Agarpara, Kolkata, 700109, India; Sikkim	
						Manipal Institute of Technology, Sikkim, India;	
						Discipline of Astronomy, Astrophysics and	
	Chakraborty S.,					Space Engineering, Indian Institute of	
	Verma P., Paudel B.,	Advances in Space				Technology, Khandwa Road, Simrol, Indore,	
	Das S.	Research	70	3		453552, India	Article
4	Misra K.P., Kumawat	Materials Science				Department of Physics, School of Basic	
	A., Bandopadhyay A.,	and Engineering B:				Sciences, Manipal University Jaipur, Rajasthan,	
	Modak B., Mukherjee	Solid-State	282		115761	Jaipur, 303007, India; Department of Physics,	Article

	S.K., Babu P.D., Kabi	Materials for			University of Gour Banga, West Bengal, Malda,	
	S., Chattopadhyay S.,	Advanced			732103, India; Theoretical Chemistry Section,	
	Misra R.D.K.	Technology			Chemistry Division, Bhabha Atomic Research	
					Centre, Mumbai, 400085, India; Department of	
					Physics, Birla Institute of Technology, Mesra,	
					Jharkhand, Ranchi, 835215, India; UGC-DAE	
					Consortium for Scientific Research, R5 Shed,	
					Bhabha Atomic Research Centre, Mumbai,	
					400085, India; Department Physics, Sikkim	
					Manipal Institute of Technology, Sikkim	
					Manipal University, Sikkim, Majitar, 737136,	
					India; Metallurgical, Materials and Biomedical	
					Engineering, University of Texas at El Paso, 500	
					W University, El Paso, TX 79968, United States	
5					Electrical Engineering, IIT (ISM), Jharkhand,	
					Dhanbad, India; Electrical & Electronics	
					Engineering, Sikkim Manipal Institute of	
					Technology, Sikkim, India; Electrical &	
	Gupta S.K., Ghose T.,	Electric Power			Electronics Engineering, BIT, Mesra, Jharkhand,	
	Chatterjee K.	Systems Research	209	108037	Ranchi, India	Article
6		Sustainable Energy			Department of Electrical and Electronics	
	Sengupta A., Das D.K.	Technologies and	52	102123	Engineering, SMIT, Sikkim Manipal University,	Article
	Sengapta A., Das D.K.	Assessments	32	102123	India; Department of Electrical and Electronics	Articic
		713363311161113			Engineering, NIT Nagaland, India	
7					Centre for Materials Science and	
					Nanotechnology, Sikkim Manipal Institute of	
	Majumder S.,				Technology, Sikkim Manipal University, Sikkim,	
	Chatterjee S., Basnet	Journal of			India; Sikkim Institute of Science & Technology,	
	P., Mukherjee J.	Molecular Liquids	358	119138	Sikkim University, Sikkim, India; Applied	Article

						Spectroscopy & Diagnostics, Bhabha Atomic	
						Research Centre, Mumbai, India	
8						Centre for Materials Science and	
0						Nanotechnology, Sikkim Manipal Institute of	
						Technology, Sikkim Manipal University, East	
						Sikkim, Majhitar, 737136, India; Department of	
						Metallurgical and Materials Engineering,	
						National Institute of Technology Durgapur,	
						Durgapur, 713209, India; Department of	
						Chemistry, Sikkim Manipal Institute of	
		Journal of				Technology, Sikkim Manipal University, East	
	Rai S., Bhujel R.,	Materials Science:				Sikkim, Majhitar, 737136, India; Department of	
	Mondal M.K., Biswas	Materials in				Physics, National Institute of Technology,	
	J., Swain B.P.	Electronics	33	20		Manipur, Manipur, Langol, 795004, India	Article
9						Centre for Materials Science and	
						Nanotechnology, Sikkim Manipal Institute of	
						Technology, Sikkim Manipal University, Sikkim,	
						India; Department of Chemistry, Sikkim	
						Institute of Science & Technology, Sikkim	
						University, Sikkim, India; Department of	
	Samanta D., Basnet	Inorganic				Chemistry, Sikkim Manipal Institute of	
	P., Jha S., Chatterjee	Chemistry				Technology, Sikkim Manipal University, Sikkim,	
	S.	Communications	141		109498	India	Article
10	Barwant M., Ugale Y.,					Department of Chemistry, Sanjivani Arts,	
	Ghotekar S., Basnet					Commerce and Science College, Savitribai	
	P., Nguyen V H.,					Phule Pune University, Maharashtra,	
	Pansambal S., Ananda					Kopargaon, 423603, India; Department of	
	Murthy H.C., Sillanpaa					Chemistry, Smt.	
	M., Bilal M., Oza R.,					Devkiba Mohansinhji Chauhan College of	
	Karande V.	Chemical Papers	76	7		Commerce and Science, University of Mumbai,	Article

					Dadra and Nagar Hayoli (UT) Silvacca 206220
					Dadra and Nagar Haveli (UT), Silvassa, 396230,
					India; Centre for Materials Science and
					Nanotechnology, Sikkim Manipal Institute of
					Technology, Sikkim Manipal University, Sikkim,
					Gangtok, India; Faculty of Allied Health
					Sciences, Chettinad Academy of Research and
					Education (CARE), Tamilnadu, Kelambakkam,
					Chennai, 603 103, India; Department of
					Chemistry, Shri Saibaba College Shirdi,
					Savitribai Phule Pune University, Maharashtra,
					Shirdi, 423109, India; Department of Applied
					Chemistry, School of Applied Natural Sciences,
					Adama Science and Technology University,
					P.O. Box: 1888, Adama, Ethiopia; Department
					of Chemical Engineering, School of Mining,
					Metallurgy and Chemical Engineering,
					University of Johannesburg, P. O. Box 17011,
					Doornfontein, 2028, South Africa; Chemistry
					Department, College of Science, King Saud
					University, Riyadh, 11451, Saudi Arabia; School
					of Life Science and Food Engineering, Huaiyin
					Institute of Technology, Huaian, 223003, China;
					Department of Chemistry, D.J.M. Commerce
					and B.N.S. Science College, Savitribai Phule
					Pune University, S.N. Arts, Maharashtra,
					Sangamner, 422605, India; Department of
					Botany, Yashavantrao Chavan Institute of
11	Demonico N. Demol- C	NA. Itimo o dio Togle			Science, Maharashtra, Satara, 415001, India
11	Banerjee N., Borah S.,	Multimedia Tools	81	17	Department of Computer Science and Article
	Sethi N.	and Applications			Engineering, GIET University, Odisha, India;

						Department of Computer Applications, Sikkim		
						Manipal Institute of Technology, Sikkim		
						Manipal University, Sikkim, India		
12						Department of Electrical and Electronics		
						Engineering, National Institute of Technology,		
						Sikkim, India; Department of Electrical and		
						Electronics Engineering, Sikkim Manipal		
						Institute of Technology, Sikkim Manipal		
						University, Sikkim, India; Department of		
						Electrical Engineering, Government		
						Engineering College, Banka, Department of		
	Koirala K., Tamang	Journal of Energy				Science and Technology, Aryabhatta		
	M., Shabbiruddin	Storage	51		104351	Knowledge University, Bihar, India	Article	
13						Associate Professor, Dept of CSE, Sikkim		
						Manipal Institute of Technology, Sikkim		
						Manipal University, Sikkim, India; Department		
						of Computer Engineering & Applications, GLA		
						University, UP, Mathura, India; Dept of IT,		
	Rai P., Ghose M.K.,	Egyptian				Sikkim Manipal Institute of Technology, Sikkim		
	Kumar Deva Sarma H.	Informatics Journal	23	2		Manipal University, Sikkim, India	Article	
14		Structural Design of				National Institute of Technology, Silchar, India;		
	Ghosh T., Sil A.	Tall and Special	31	9	e1930	Sikkim Manipal Institute of Technology, Sikkim	Article	
		Buildings				Manipal University, Gangtok, India		
15					Departm	ent of Chemistry, Sikkim Manipal Institute of Techn	ology, Sikkim	
					Manipal	University, Sikkim, Gangtok, India; Department of C	Chemistry, Birla	
					Institute	of Technology and Sciences-Pilani Hyderabad Camp	ous,	
					Shameer	pet, Telangana, Hyderabad, 500078, India; Centre f	or Nano	
	Jha S., Kumari N.,				Science a	nd Engineering, Indian Institute of Science, Karnata	aka, Bangalore,	
	Chettri B., Dey N.	ChemPhysChem	23	12	560012,	ndia		Article

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16						Department of Mechanical Engineering, Sri	
						Sairam Institute of Technology, Chennai, 600	
						044, India; Department of Mechanical	
						Engineering, Sikkim Manipal Institute of	
						Technology, Sikkim Manipal University,	
						Majhitar, 737 136, India; Department of	
						Machining, Assembly and Engineering	
						Metrology, Faculty of Mechanical Engineering,	
						VSB-Technical University of Ostrava, Ostrava,	
						708 00, Czech Republic; Department of	
	Shanmugasundar G.,					Mechanical Engineering, Vel Tech Rangarajan	
	Sapkota G., Čep R.,					Dr. Sagunthala R&D Institute of Science and	
	Kalita K.	Processes	10	6	1172	Technology, Avadi, 600 062, India	Article
17		Proceedings of the				Department of Medical Biotechnology, Sikkim	
	Byahut A., Bag A.	Indian National	88	2		Manipal University, 5th Mile, Tadong, Sikkim,	Article
		Science Academy				Gangtok, 737102, India	
18						Department of Electrical and Electronics	
						Engineering, Sikkim Manipal University, Sikkim	
		Sadhana - Academy				Manipal Institute of Technology, Gangtok,	
		Proceedings in				India; Department of Electrical and Electronics	
		Engineering				Engineering, National Institute of Technology	
	Sengupta A., Das D.K.	Sciences	47	2	78	Nagaland, Chumukedima, India	Article
19						Department of Mechanical Engineering, Vel	
						Tech Rangarajan Dr. Sagunthala R&D Institute	
						of Science and Technology, Avadi, India;	
						Department of Mechanical Engineering, Sikkim	
		Sadhana - Academy				Manipal Institute of Technology, Sikkim	
		Proceedings in				Manipal University, Sikkim, India; Department	
	Kalita K., Ghadai R.K.,	Engineering				of Production Engineering, Jadavpur University,	
	Chakraborty S.	Sciences	47	2	57	West Bengal, Kolkata, India	Article

		1	1		1		
20	Das S., Sharma B.	Silicon	14	9		Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, 737136, India	Article
21	Dutta R., Subash T.D., Paitya N.	Silicon	14	8		Department of Electronics and Communication Engineering, Surendra Institute of Engineering & Management, MAKAUT, West Bengal734009, India; Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim, 737136, India; Department of Electrical and Electronics Engineering, Mangalam College of Engineering, Kerala686631, India	Article
22	Dutta N., Sarma H.K.D.	Journal of Ambient Intelligence and Humanized Computing	13	6		Department of Computer Engineering, Marwadi University, Gujarat, Rajkot, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Sikkim, Majitar, India	Article
23	Pradhan A., Koirala P., Bhandari S.S., Dutta S., García- Grau P., Sampath H., Sharma I.	Frontiers in Psychiatry	13		869647	Department of Psychiatry, Sikkim Manipal Institute of Medical Sciences, Sikkim Manipal University, Gangtok, India; Department of Respiratory Medicine, Sikkim Manipal Institute of Medical Sciences, Sikkim Manipal University, Gangtok, India; Programa de Maestro de Educación Infantil, Universidad Católica de Valencia, Valencia, Spain	Article
24	Kumar V., Kumar V.S., Harikrishna S., Roy M.K.	AIP Conference Proceedings	2393		20198	Department of Automobile Engineering, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi, India; Department of Mechanical Engineering, Sikkim	Conference Paper

						Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India	
25						Sikkim Manipal Institute of Technology, Sikkim	
1	Mustafa Z., Kumar V., Sharief S.M., Ameen M.M.	AIP Conference Proceedings	2393		20097	Manipal University, Sikkim, 737 136, India; Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Avadi, 600 062, India	Conference Paper
	Gautam D., Dolma K.G., Khandelwal B., Mitsuwan W., Mahboob T., Pereira M.L., Nawaz M., Wiart C., Ardebili A., Siyadatpanah A., Ehtesham H., Patra J.K., Kwanhian W.,	The Medical				Walailak University, School of Allied Health Sciences and Research Excellence Centre for Innovation and Health Products (RECIHP)Nakhon Si Thammarat, Thailand; Sikkim Manipal University, Sikkim Manipal Institute of Medical Sciences (SMIMS), Department of MicrobiologySikkim, India; Sikkim Manipal University, Sikkim Manipal Institute of Medical Sciences (SMIMS), Department of MedicineSikkim, India; University of Malaya, Faculty of Medicine, Department of Medical MicrobiologyKuala Lumpur, Malaysia; University of Aveiro, Department of Medical Sciences and CICECO-Aveiro Institute of MaterialsAveiro, Portugal; Imam Abdulrahman Bin Faisal University, Institute for Research and Medical Consultations (IRMC), Department of Nano-Medicine Research, Dammam, Saudi Arabia; School of Pharmacy, Nottingham University Malaysia CampusSelangor, Malaysia; Golestan University of Medical Sciences, Laboratory	
	Nissapatorn V.	journal of Malaysia	77	3		Sciences Research Center, Gorgan, Iran; Birjand	Article

						University of Medical Sciences, Ferdows School of Paramedical and Health, Birjand, Iran; Research Institute of Integrative Life Sciences, Dongguk University-Seoul, Goyang-Si, South Korea	
27	Pandey S., Saha I., Prakash O., Mukherjee T., Iqbal J., Roy A.K., Wasilewski M., Brar L.S.	Applied Sciences (Switzerland)	12	10	4904	Mechanical Engineering Department, Birla Institute of Technology, Mesra, Ranchi, 835215, India; Chemical Engineering Department, University of Calcutta, Kolkata, 700073, India; Civil and Environmental Engineering Department, Birla Institute of Technology, Mesra, Ranchi, 835215, India; Mechanical Engineering Department, Sikkim Manipal University, Majitar, Rangpo, 737136, India; Faculty of Production Engineering and Logistics, Opole University of Technology, 76 Proszkowska St, Opole, 45-758, Poland	Article
28	Sur S.N., Singh A.K.,	(SWITZCITATIO)	12	10	7307	Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Majitar, 737136, India; Department of Information Technology, North Eastern Hill University, Meghalaya, Shillong, 793022, India; Instituto de Telecomunicações (IT), Departamento de Eletrónica, Telecomunicações e Informática (DETI), University of Aveiro, Aveiro, 3810-193, Portugal; Faculty of Mechanical-Electrical and	Article
	Kandar D., Silva A., Nguyen N.D.	Electronics (Switzerland)	11	9	1411	Computer Engineering, School of Engineering and Technology, Van Lang University, 69/68	Review

	1	T		1				
						Dang Thuy Tram Street, Ward 13, Binh Thanh		
						District, Ho Chi Minh City, 70000, Viet Nam		1
29					Departme	ent of Pharmacy Practice, Manipal College of Pharm	naceutical	
					Sciences,	Manipal Academy of Higher Education, Karnataka,	, Manipal,	
					576104, I	ndia; Manipal Center for Infectious Diseases, Prasa	nna School of	
					Public He	alth, Manipal Academy of Higher Education, Karnat	taka576104,	
					India; Dep	partment of Surgery, Kasturba Medical College and	Hospital,	
					Manipal A	Academy of Higher Education, Karnataka, Manipal,	576104, India;	
	Patel D.G., Kurian S.J.,				Departme	ent of Biochemistry, All India Institute of Medical S	ciences	
	Miraj S.S., Rashid M.,				Jodhpur,	Rajasthan342005, India; Department of Medicine, S	Sikkim	
	Thomas L., Rodrigues				Manipal I	nstitute of Medical Sciences, Sikkim Manipal Unive	rsity, Sikkim,	
	G.S., Banerjee M.,				Gangtok,	737102, India; Department of Infectious Diseases,	Kasturba	
	Khandelwal B., Saravu	Current Diabetes			Medical C	College and Hospital, Manipal Academy of Higher Ed	ducation,	
	K., Rao M.	Reviews	18	4	Karnataka	a, Manipal, 576104, India		Review
30		Containability				Department of Civil Engineering, Sikkim		
	Bhuiyan C.	Sustainability	17	3		Manipal Institute of Technology, Sikkim,	Review	
		Science				Majitar, 737136, India		
31						Bioengineering Laboratory, Department of		
	C: 1.5. \(\)					Textile and Fiber Engineering, Indian Institute		
	Singh P., Verma C.,					of Technology Delhi, New Delhi, 110016, India;		
	Mukhopadhyay S.,	International				Department of Pathology, Sikkim Manipal		
	Gupta A., Gupta B.	Journal of				Institute of Medical Sciences, Tadong, Sikkim,		
		Pharmaceutics	618		121661	Gangtok, 737102, India	Article	
32						Department of Computer Applications, Sikkim		
						Manipal Institute of Technology, Sikkim		
	Panigrahi R., Borah S.,					Manipal University, Sikkim, Majitar, 737136,		
	Pramanik M., Bhoi					India; KIET Group of Institutions, Delhi-NCR,		
	A.K., Barsocchi P.,					Ghaziabad, 201206, India; Directorate of		
	Nayak S.R., Alnumay	Computer				Research, Sikkim Manipal University,		
	W.	Communications	188			Sikkim, Gangtok, 737102, India; AB-Tech	Article	

						eResearch (ABTeR), Burla 768018, Sambalpur, India; Institute of Information Science and Technologies, National Research Council, Pisa, 56124, Italy; Amity School of Engineering and Technology, Amity University Uttar Pradesh, Noida, India; Department of CS, King Saud University, Riyadh, Saudi Arabia	
33	Ranwa M., Nandy P.	The Journal of the Association of Physicians of India	70	4		Sikkim Manipal Institute of Medical Sciences, Gangtok, India	Article
34	Kamath D., Singh S., Kashyap S.	Visual Journal of Emergency Medicine	27		101373	Department of ENT, Sikkim Manipal Institute of Medical Sciences, Sikkim, Gangtok, India	Article
35	Sarda R.K., Sinha R., Sherpa M., Gupta A.	Journal of Neurosciences in Rural Practice	13	2		Department Of Anatomy, Sikkim Manipal Institute Of Medical Sciences, Sikkim, Gangtok, India; Department Of Neurosurgery, Jp Hospital Noida, Uttar Pradesh, Noida, India; Department Of Pathology, Sikkim Manipal Institute Of Medical Sciences, Sikkim, Gangtok, India	Article
36	Perumal M., Saravanan A., Sunooj K.V., Sinha S.K.	IEEE Transactions on Plasma Science	50	4		Department of Physics, Pondicherry University, Puducherry, 605014, India; Department of Food Science and Technology, Pondicherry University, Puducherry, India; Department of Physics, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Mahjitar, Sikkim737102, India	Article
37	Chettri M., Das S.	Visual Journal of Emergency Medicine	27		101279	Associate Professor, Department of ENT Sikkim Manipal University, Sikkim, Gangtok, India; Department of ENT All India Institute of	Article

						Medical Sciences Mangalagiri, Andhra	
						PradeshPIN – 522503, India	
38						Department of Computer Science and	
						Engineering, Sikkim Manipal Institute of	
						Technology, Sikkim, Majhitar, India;	
		Journal of the				Department of Natural Science, Maulana Abul	
		Indian Society of				Kalam Azad University of Technology, West	
	Kar C., Banerjee S.	Remote Sensing	50	4		Bengal, Kolkata, India	Article
39						Computer Science and Engineering	
						Department, SRM University, Andhra Pradesh,	
	Dutta N., Sarma	Wireless Personal	123	3		Guntur, 522503, India; Department of	Article
	H.K.D.	Communications	123	3		Information Technology, Sikkim Manipal	Article
						Institute of Technology, Sikkim, Majitar,	
						737136, India	
40						Department of Mechanical Engineering, Sikkim	
						Manipal Institute of Technology, Sikkim	
						Manipal University, Majitar, Sikkim, India;	
						Department of Production Engineering,	
	Das P.P., Chakraborty					Jadavpur University, West Bengal, Kolkata,	
	S.	Scientia Iranica	29	2		India	Article
41						School of Mechanical Engineering, KIIT	
						University, Bhubaneswar, 751024, India;	
						Depratment of Mechanical Engineering, Sikkim	
						Manipal Institute of Technology, Sikkim	
		European Physical				Manipal University, Sikkim, Gangtok, 737136,	
	Guha S., Das S.	Journal Plus	137	3	363	India	Article
42	Raina N., Pahwa R.,					Department of Pharmaceutics, Delhi	
	Bhattacharya J., Paul					Pharmaceutical Sciences and Research	
	A.K., Nissapatorn V.,					University, New Delhi, 110017, India; Institute	
	Pereira M.L., Oliveira	Pharmaceutics	14	3	574	of Pharmaceutical Sciences, Kurukshetra	Review

	S.M.R., Dolma K.G., Rahmatullah M., Wilairatana P., Gupta M.					University, Haryana, 136119, India; School of Biotechnology, Jawaharlal Nehru University, New Delhi, 110067, India; School of Pharmacy and Pharmacology, University of Tasmania, Hobart, 7001, Australia; School of Allied Health Sciences and World Union for Herbal Drug Discovery [WUHeDD], Walailak University,	
						Nakhon Si Thammarat, 80160, Thailand; CICECO-Aveiro Institute of Materials, University of Aveiro, Aveiro, 3810-193, Portugal; Department of Medical Sciences, University of Aveiro, Aveiro, 3810-193, Portugal; Hunter Medical Research Institute, New Lambton 2305, Australia; Department of Microbiology, Sikkim Manipal Institute of Medical Sciences, Sikkim Manipal University, Gangtok, 737102, India; Department of Biotechnology & Genetic	
						Engineering, University of Development Alternative, Lalmatia, Dhaka, 1207, Bangladesh; Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University, Bangkok, 10400, Thailand	
43	Kumar V., Kumar A., Kumar S., Sarangi S.	Mechanical Systems and Signal Processing	166		108436	Department of Mechanical Engineering, Indian Institute of Technology Patna, Bihar, 801106, India; Department of Mechanical Engineering, Sikkim Manipal Institute of Technology, Sikkim, 737136, India	Article
44	Maurya S.K., Sarkar S., Mondal H.K.,	Electrophoresis	43	05- Jun		Department of Mathematics, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majitar, Rangpo, East Sikkim, India;	Article

	Ohshima H.,					Physics and Applied Mathematics Unit, Indian	
	Gopmandal P.P.					Statistical Institute, West Bengal, Kolkata,	
						India; Department of Electronics and	
						Communication Engineering, National Institute	
						of Technology Durgapur, West Bengal,	
						Durgapur, India; Faculty of Pharmaceutical	
						Sciences, Tokyo University of Science, Chiba,	
						Noda, Japan; Department of Mathematics,	
						National Institute of Technology Durgapur,	
						West Bengal, Durgapur, India	
45						Department of Mechanical Engineering, Sikkim	
	Chattania a C					Manipal Institute of Technology, Sikkim	
	Chatterjee S.,	OPSEARCH	59	1		Manipal University, Sikkim, Majitar, India;	Article
	Chakraborty S.					Department of Production Engineering,	
						Jadavpur University, Kolkata, India	
46						Department of Management Studies, Sikkim	
	Saha S.K., Jha A.	Bioscience Journal	38		e38014	Manipal Institute of Technology, Sikkim	Article
						Manipal University, Majitar, India	
47						Department of Chemistry, Sikkim Manipal	
	Ali M., Bardhan S.,	Journal of	348		118455	Institute of Technology, Sikkim Manipal	Article
	Saha S.K.	Molecular Liquids	340		110433	University, India; Department of Chemistry,	Article
						University of North Bengal, Darjeeling, India	
48						Centre for Materials Science and	
						Nanotechnology, Sikkim Manipal Institute of	
						Technology, Sikkim Manipal University,	
						Majhitar East Sikkim737136, India; Department	
						of Metallurgical and Materials Engineering,	
	Rai S., Bhujel R.,					National Institute of Technology Durgapur,	
	Mondal M.K., Swain					Durgapur, 713209, India; Department of	
	B.P., Biswas J.	Materials Advances	3	6		Physics, National Institute of Technology,	Article

					Maninum Longol Maninum70F004 Inclice	
					Manipur, Langol Manipur795004, India;	
					Department of Chemistry, Sikkim Manipal	
					Institute of Technology, Sikkim Manipal	
					University, East Sikkim Majhitar737136, India	
49					Department of Computer Applications, Sikkim	
					Manipal Institute of Technology, Sikkim,	
					737136, India; Department of Computer	
	Chalraharty C				Science and Engineering, JIS University, West	
	Chakraborty S.,				Bengal, Kolkata, 700109, India; Universidad	
	Pradhan R., Dey N.,				Internacional de La Rioja, Logroño, 26006,	
	Crespo R.G., Tavares				Spain; Instituto de Ciência e Inovação em	
	J.M.R.S.				Engenharia Mecânica e Engenharia Industrial,	
					Departamento de Engenharia Mecânica,	
					Faculdade de Engenharia, Universidade	
		ScienceAsia	48		do Porto, Porto, 4200-465, Portugal	Article
50					(SEA Water Team), World Union for Herbal	
					Drug Discovery (WUHeDD), Research	
	Sangkanu S.,				Excellence Center for Innovation and Health	
	Mitsuwan W.,				Products (RECIHP), Walailak University, Nakhon	
	Mahboob T.,				Si Thammarat, Thailand; Akkhraratchumari	
	Mahabusarakam W.,				Veterinary College, Walailak University,	
	Chewchanwuttiwong				Nakhon Si Thammarat, Thailand; Division of	
	S., Siphakdi P., Jimoh				Physical Science, Faculty of Science, Graduate	
	T.O., Wilairatana P.,				School, Prince of Songkla University,	
	Dolma K.G., Pereira				Songkhla, 90110, Thailand; Faculty of Science	
	M.D.L., Rahmatullah				and Industrial Technology, Prince of Songkla	
	M., Wiart C., Norouzi				University, Surat Thani Campus, Makhamtae,	
	R., Siyadatpanah A.,				Surat Thani, Muang, Thailand; Department of	
	Mutombo P.N.,				Pharmacognosy and Pharmaceutical Botany,	
	, ·	Acta Tronica	226	106266		Article
	Nissapatorn V.	Acta Tropica	226	106766	Faculty of Pharmaceutical Sciences,	Article

					Chulalongkorn University, Bangkok, Thailand;	
					Department of Biochemistry, Faculty of Health	
					Sciences, Islamic University in Uganda, P. O.	
					Box 7689, Kampala, Uganda; Department of	
					Clinical Tropical Medicine, Faculty of Tropical	
					Medicine, Mahidol University, Bangkok,	
					Thailand; Department of Microbiology, Sikkim	
					Manipal Institute of Medical SciencesSikkim,	
					India; Department of Medical Sciences,	
					CICECO-Aveiro Institute of Materials, University	
					of Aveiro, Aveiro, Portugal; Department of	
					Biotechnology & Genetic Engineering,	
					University of Development Alternative,	
					Lalmatia, Dhaka, Bangladesh; Institute for	
					Tropical Biology & Conservation, University	
					Malaysia Sabah, Malaysia; Department of	
					Pathobiology, Faculty of Veterinary Medicine,	
					University of Tabriz, Tabriz, Iran; Ferdows	
					School of Paramedical and Health, Birjand	
					University of Medical Sciences, Birjand, Iran;	
					National Centre for Naturopathic Medicine,	
					Faculty of Health Sciences, Southern	
51					Department of Chemistry, Sikkim Manipal	
					Institute of Technology, Sikkim Manipal	
	Tamang S., Thapa A.	Journal of				
	Biswas J.	Electronics	21	1	700156, India	Article
	Tamang S., Thapa A., Chettri K., Datta B., Biswas J.	Journal of Computational Electronics	21	1	University, East, Sikkim, Majitar, 737136, India; Department of Chemistry, Amity Institute of Applied Science, Amity University, Kolkata,	Article

52					Department of OBG, Sikkim Manipal Institute	
32	Lucksom P.G., Sherpa	Journal of			of Medical Sciences, 5th Mile Tadong, Sikkim,	
	M.L., Pradhan A., Lal	Obstetrics and	72	1	Gangtok, India; Department of Biochemistry,	Review
	S., Gupta C.	Gynecology of India	12	_	Sikkim Manipal Institute of Medical Sciences,	Neview
	3., Gupta C.	dynecology of india			Gangtok, India	
53						
33					Department of Medical Biotechnology, Sikkim	
					Manipal University, Sikkim, Gangtok, 737102,	
					India; Department of Physiology, Sikkim	
					Manipal Institute of Medical Sciences, Sikkim	
	Jaiswal S., Dey R., Bag	National Academy	4=	_	Manipal University, Sikkim, Gangtok, 737102,	
	A.	Science Letters	45	1	India	Article
54					Bioengineering Laboratory, Department of	
	Sharma A., Verma C.,				Textile and Fiber Engineering, Indian Institute	
	Mukhopadhyay S.,				of Technology, New Delhi, 110016, India;	
	Gupta A., Gupta B.				Department of Pathology, Sikkim Manipal	
		ACS Applied Nano			Institute of Medical Sciences, Tadong, Sikkim,	
		Materials			Gangtok, 737102, India	Article
55					School of Engineering and Technology,	
					Department of Computer Science and	
					Engineering, GIET University, Gunupur, India;	
					KIET Group of Institutions, Delhi NCR,	
					Ghaziabad, 201206, India; Directorate of	
					Research, Sikkim Manipal University, Gangtok,	
					Sikkim 737102, India; AB-Tech eResearch	
					(ABTeR), Sambalpur, Burla 768018, India;	
					Department of Computer Science, Prince	
					Sattam Bin Abdulaziz University, College of Arts	
	Padhi D.K., Padhy N.,	Computational			and Science, Saudi Arabia; Department of	
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	Yesuf S.H.	neuroscience	2022		University of Gondar, Gondar, Ethiopia	Article

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		and Green			
		Economies in Asia			
58				Sathyabama Institute of Science and	
				Technology, Chennai, India; SRM Institute of	
				Science and Technology, Kattankulathur, India;	
	Nagarajan G., Minu	Lecture Notes in		Sikkim Manipal Institute of Technology,	
	R.I., Borah S., Mishra	Electrical		University, Sikkim, India; ITER, Siksha 'O'	Conference
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59				School of Computer Engineering, Kalinga	
				Institute of Industrial Technology(KIIT) Deemed	
				to be University, Odisha, Bhubaneswar, India;	
	Mallick P.K., Bhoi A.K.,			KIET Group of Institutions Delhi-NCR	
	González-Briones A.,			Ghaziabad, India Directorate of Research	
	Pattnaik P.K.			Sikkim Manipal University, Sikkim, Gangtok,	
	i attiiaik r.N.			India; Research on Agent based, Social and	
		Lecture Notes in		Interdisiciplinary Applications (GRASIA),	
		Electrical		Complutense University of Madrid, Madrid,	
		Engineering	860	Spain	Editorial

Department of Electronics and Telecommunication, IIEST, Shibpur, Botanical Garden Road, West Bengal, Howrah, 7111103, India; Department of Electronics and Communication Engineering, Calcutta Institute of Engineering and Management, 24/1A Chandi Ghosh Road, Tollygunge, West Bengal, Kolkata, 700040, India; Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majitar, Sikkim, East Sikkim, 737136, India School of Computer Engineering, Kalinga Institute of Industrial Technology, Odisha, Bhubaneswar, India; Grupo de Investigación BISITE Departamento de Informática y Automática, Facultad de Ciencias University of Salamanca, Instituto de Investigación Biomédica de Salamanca, Spain; KIET Group of Institutions Ghaziabad, Delhi-NCR, India Directorate of Research Sikkim Manipal University, Sikkim, Gangtok, India; IoT Digital Innovation Hub (Spain), Air Institute, Salamanca, Spain; Osaka Institute of Technology, Osaka, Japan; Universiti Malaysia Kelantan, Kelantan, Kota Bharu, Malaysia Editorial Department of ECE, Sikkim Manipal University, Sikkim, India			1	,		
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65		Research Notes on Computing and	Borah Department of Computer Application Sikkim Manipal Institute of Technology, Sil	
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69					Department of Computer Applications, SRM	
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	A.K., Kaur G., Nayak	Networks and		India; Directorate of Research, Sikkim M	anipal Conference
	S.R., Bhoi A.K.	Systems	375	University, Sikkim, Gangtok, 737102, Inc	lia Paper
72				Department of Computer Applications, S	SRM
				Institute of Science and Technology, SRN	
				Nagar, Tamil Nadu, Kattankulathur, 603	
				India; Department of Mathematics, SRM	-
				Institute of Science and Technology,	
	Sivakumar S.,			Kattankulathur, 603203, India; Departm	ent of
	Vidyanandini S.,	Lecture Notes in		Computer Science and Engineering, Kon	
	Sreedevi E., Nayak	Networks and		Lakshmaiah Education Foundation, K L	Conference
	S.R., Bhoi A.K.	Systems	375	University, Vaddeswaram, Guntur, 5225	02, Paper

				India; Amity School of Engineering and	
				Technology, Amity University Uttar Pradesh,	
				Noida, India; KIET Group of Institutions, Delhi-	
				NCR, Ghaziabad, 201206, India; Directorate of	
				Research, Sikkim Manipal University, Sikkim,	
				Gangtok, 737102, India	
73				Amity School of Engineering & Technology,	
				Amity University Uttar Pradesh, Noida, India;	
				KIET Group of Institutions, Delhi- NCR,	
	Kislay A., Singh P.,	Lecture Notes in		Ghaziabad, 201206, India; Directorate of	
	Shankar A., Nayak	Networks and		Research, Sikkim Manipal University, Sikkim,	Conference
	S.R., Bhoi A.K.	Systems	375	Gangtok, 737102, India	Paper
74				School of Computer Engineering, Kalinga	
				Institute of Industrial Technology (Deemed to	
				be University), Odisha, Bhubaneswar, India;	
				KIET Group of Institutions, Delhi-NCR,	
		Lecture Notes in		Ghaziabad, 201206, India; Directorate of	
	Chandrayan S.S.,	Networks and		Research, Sikkim Manipal University, Sikkim,	Conference
	Singh K., Bhoi A.K.	Systems	375	Gangtok, 737102, India	Paper
75	Boroh C Koma C	Lecture Notes in		Sikkim Manipal Institute of Technology,	
	Borah S., Kama C., Rakshit S., Vajjhala	Networks and	375	Majhitar, India; American University of Nigeria,	Conference
	N.R.	Systems	3/3	Yola, Nigeria; University of New York Tirana,	Paper
	IV.IV.	Systems		Tirana, Albania	
76				Chitkara University Institute of Engineering and	
				Technology, Chitkara University, Punjab,	
				Rajpura, India; Amity School of Engineering and	
	Muskaan, Sarangi	Lecture Notes in		Technology, Amity University Uttar Pradesh,	
	P.K., Singh S., Nayak	Networks and		Noida, India; KIET Group of Institutions, Delhi-	Conference
	S.R., Bhoi A.K.	Systems	375	NCR, Ghaziabad, 201206, India; Directorate of	Paper

					Research, Sikkim Manipal University, Sikkim,	
					Gangtok, 737102, India	
77					MBA (Hospital and Healthcare Management),	
					Symbiosis Institute of Health Sciences, A	
					Constituent of Symbiosis International	
					(Deemed University), Pune, India; Department	
					of Management Studies, Sikkim Manipal	
					Institute of Technology, Majhitar, India;	
					Department of Management Studies,	
	Singh A., Jha A.,	Journal of			Development Management Institute, Patna,	
	Purbey S., Ravi P.	Integrated Care			India; Manipal Hospital, Pune, India	Article
78	Carkar C Chattri C	Matarials Taday			Department of Civil Engineering, Sikkim	
	Sarkar S., Chettri S., Bomzon U.	Materials Today:	60		Manipal Institute of Technology, Sikkim	Article
	BOMZON U.	Proceedings			Manipal University, Majhitar, 737136, India	
79					School of Computer Engineering (SOCE), GIET	
					University, Gunupur, India; Department of	
					Computer Applications, SMIT, Sikkim Manipal	
	Bhattacharya S.,				University, Sikkim, Rangpo, India; Department	
	Borah S., Mishra B.K.,	Multimedia Tools			of Information Technology, Techno India	
	Mondal A.	and Applications			College of Technology, Kolkata, India	Article
80		International			Sikkim Manipal Institute of Technology, Sikkim	
	Saha S.K., Adhikary A.,	Journal of Reliable	11	1	Manipal University, India; Sikkim Manipal	Article
	Jha A., Mehta V.K.	and Quality E-	11	1	Institute of Medical Sciences, Sikkim Manipal	Article
		Healthcare			University, India	
81					Department of Global Political Studies,	
	Povolandor D	Handbook on			Sweden; Malmö Institute of Studies of	Pook
	Bevelander P.,	Migration and			Migration, Diversity and Welfare, Malmö	Book
	Hollifield J.F.	Welfare			University, Sweden; Tower Center, SMU, India;	Chapter
					Wilson Center, United States	

82					Department of Mathematics, Sikkim Manipal	
	Pradhan B., Abdikian	Waves in Random			Institute of Technology, Sikkim Manipal	
	, , , , , , , , , , , , , , , , , , ,	and Complex			University, East-Sikkim, Rangpo, India;	Article
	A., Saha A.	Media			Department of Physics, Malayer University,	
					Malayer, Iran	
83					School of Computer Engineering, Kalinga	
					Institute of Industrial Technology, Deemed to	
					Be University, Bhubaneswar, 751024, India;	
					KIET Group of Institutions, Delhi-NCR,	
					Ghaziabad, 201206, India; Directorate of	
					Research, Sikkim Manipal University, Sikkim,	
					Gangtok, 737102, India; AB-Tech EResearch	
					(ABTeR), Burla, Sambalpur, 768018, India;	
					Department of Intelligent Mechatronics	
					Engineering, Sejong University, Seoul, 05006,	
					South Korea; Department of Computer	
					Science, College of Arts and Science, Prince	
					Sattam Bin Abdul Aziz University, Wadi Ad-	
	Datta D., Mallick P.K.,	Computational			Dawasir11991, Saudi Arabia; School of	
	Bhoi A.K., Ijaz M.F.,	Intelligence and			Computing, Gachon University, Seongnam-si,	
	Shafi J., Choi J.	Neuroscience	2022	3854635	13120, South Korea	Review
84					Department of Physics, Sikkim Manipal	
					Institute of Technology, SMU, Sikkim737136,	
					India; Department of Chemistry, Sikkim	
					Manipal Institute of Technology, SMU,	
	Paul P., Biswas J.,				Sikkim737136, India; Department of Physics,	
	Chattopadhyay S.,	Materials Today:			School of Basic Sciences, Manipal University	
	Kabi S.	Proceedings	58		Jaipur, Rajasthan, Jaipur, 303007, India	Article

85	Das A.	Materials Today: Proceedings	58		Department of Physics, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Majhitar, 737136, India	Article
86	Chettri B., Sharma A., Das S.K., Sharma B.	Materials Today: Proceedings	58		Department of Physics, Sikkim Manipal Institute of Technology, Rangpo, India; Electronics and Communication Engg., Sikkim Manipal Institute of Technology, Rangpo, India	Article
87	Ghosh A., Pal H., Das T., Chatterjee S., Das A.	Materials Today: Proceedings	58		Department of Electrical and Electronics Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, 737136, India; Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, 737136, India; Centre for Materials Science and Nanotechnology, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, 737136, India; Department of Electronics and Communication, National Institute of Technology, Durgapur, 713209, India; Department of Physics, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, 737136, India	Article
88	Saha S.K.	International Journal of Reliable and Quality E- Healthcare	11	1	Sikkim Manipal Institute of Technology, Sikkim Manipal University, India	Article
89	Chhetri N., Das G., Kole A., Saha H.,	Materials Today: Proceedings	58		Centre for Material Science and Nanotechnology, Sikkim Manipal Institute of Technology, Sikkim Manipal University,	Article

	Haldar S., Chatterjee			Sikkim737136, India; Centre of Excellence for
	,			
	S.			Green Energy and Sensor Systems, Indian
				Institute of Engineering, Science and
				Technology, Shibpur, West Bengal, Howrah,
				711103, India; Department of Physics,
				University of North Bengal, Raja
				Rammohanpur, West Bengal, Darjeeling,
				734134, India
90				Department of Chemistry, School of Basic
				Sciences, Manipal University Jaipur, Rajasthan,
				Jaipur, 303007, India; Department of Physics,
	Kumari P., Sharma A.,			School of Basic Sciences, Manipal University
	Kumawat A., Samanta			Jaipur, Rajasthan, Jaipur, 303007, India;
	S., Misra K.P., Rao A.,			Department of Physics, Manipal Institute of
	Kabi S.,			Technology, Manipal Academy of Higher
	Chattopadhyay S.			Education, Manipal, 576104, India;
				Department of Physics, Sikkim Manipal
		Materials Today:		Institute of Technology, Sikkim Manipal
		Proceedings	58	University, Sikkim, Majitar, 737136, India Article
91				Department of Physiotherapy, Manipal College
	R. Velingkar K.,			of Health Professions, Manipal Academy of
	Ramachandra P., V	Physiotherapy		Higher Education, Manipal, India; Department
	Pai M., Krishna Rao B.	Theory and		of Obstetrics and Gynecology, Sikkim Manipal
		Practice		Institute of Medical Sciences, Gangtok, India Article
92				Sikkim Manipal Institute of Technology,
				Department of Information Technology,
				Rangpo, Sikkim, 737136, India; Cloud Shine
	Chakrabarty S., Islam			Global LLP, Assam, Guwahati, 781028, India;
	R., Pricop E., Sarma			Petroleum- Gas University of Ploiesti,
	H.K.D.	IEEE Access	10	Department of Control Engineering, Computers Article

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	Sivaraman A.K., Rani			Kattankulathur Tamil Nadu, Chennai, 603203,	
	S., Dey B., Balakrishna			India; School of Computer Science and	
	R.			Engineering, Center for Cyber Physical Systems,	
				Vellore Institute of Technology (VIT), Tamil	
				Nadu, Chennai, 600127, India; Department of	
				Computer Science and Engineering, M.	
				Kumarasamy College of Engineering, Tamil	
				Nadu, Karur, 639113, India; Department of	
				Computer Science and Engineering, Vignan's	
				Foundation for Science, Technology &	
				Research, Andhra Pradesh, Guntur, 522213,	
				India; School of Computer Science and	
				Engineering, Vellore Institute of Technology	
				(VIT), Tamil Nadu, Chennai, 600127,	
				India; Department of Computer Science and	
				Engineering, Gulzar Group of Institutions,	
				Punjab, Khanna, 141401, India; Department of	
				Information Technology, Sikkim Manipal	
				Institute of Technology, Sikkim Manipal	
				University, Sikkim, 737136, India; Department	
				of Computer science and Engineering, Vels	
				Institute of Science Technology and Advanced	
				Studies (VISTAS), Tamil Nadu, Chennai, 600117,	
				India	
97				SRM Institute of Science and Technology,	
				Tamilnadu, Kattankulathur, India; Sathyabama	
	Minu R.I., Nagarajan	Smart Innovation,		Institute of Science and Technology,	
	G., Borah S., Mishra	Systems and			Conference
	D.	Technologies	286	Institute of Technology, Sikkim Manipal	Paper

				University, Sikkim, India; ITER, Siksha 'O'	
				Anusandhan University, Bhubaneswar, India	
98	Saravanan T.R., Nagarajan G., Minu R.I., Borah S., Mishra D.	Smart Innovation, Systems and Technologies	286	SRM Institute of Science and Technology, Chennai, India; Sathyabama Institute of Science and Technology, Chennai, India; Sikkim Manipal University, Gangtok, India	Conference Paper
99	Nagarajan G., Minu R.I., Saravanan T.R., Borah S., Mishra D.	Smart Innovation, Systems and Technologies	286	Sathyabama Institute of Science and Technology, Tamilnadu, Chennai, India; SRM Institute of Science and Technology, Tamilnadu, Kattankulathur, India; Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India; ITER, Siksha 'O' Anusandhan University, Bhubaneswar, India	Conference Paper
100	Sapkota G., Das S., Sharma A., Kumar Ghadai R.	Materials Today: Proceedings	58	Department of Mechanical Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majitar, 737136, India; Sikkim State University, Tadong, Gangtok, 737102, India	Article
101	Pal H., Ghosh A., Chatterjee S.,	Materials Today:	E0	Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim737136, India; Department of Electronics and Communication, National Institute of Technology, Durgapur, 713209, India; Centre for Materials Science and Nanotechnology, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim737136, India; Department of Electrical and Electronics Engineering, Sikkim Manipal	Articlo
	Mahapatra R.	Proceedings	58	and Electronics Engineering, Sikkim Manipal	Article

					Institute of Technology, Sikkim Manipal	
					University, Sikkim737136, India	
102					Department of Electrical and Electronics	
					Engineering, Sikkim Manipal Institute of	
		Energy Sources,			Technology, Sikkim Manipal University, Sikkim,	
		Part A: Recovery,			India; Department of Electrical Engineering,	
		Utilization and			Government Engineering College, Banka, ,	
		Environmental			Department of Science and Technology,	
	Pradhan P.,	Effects			Aryabhatta Knowledge University, Bihar, India;	
	Shabbiruddin,				Vendor Management, COTIVITI, Kathmandu,	
	Pradhan S.		44	2	Nepal	Article
103		International			Vel Tech Rangarajan Dr. Sagunthala R&D	
	Kalita K., Ghadai R.K.,	Journal of Applied	13	1	Institute of Science and Technology, Chennai,	Article
	Bansod A.	Metaheuristic	15	1	India; Sikkim Manipal Institute of Technology,	Article
		Computing			Sikkim, India	
104	Sarkar P., De S.,	Studies in			Sikkim Manipal Institute of Technology, SMU,	Book
	Gurung S.	Computational	1029		Rangpo, India; Cooch Behar Government	Chapter
	Gurung 5.	Intelligence			Engineering College, Cooch Behar, India	Chapter
105					Sikkim Manipal Institute of Technology, Staff	
	Ghatak S.,	Multimedia Tools			Quater L-304, Majitar, Rangpo, East Sikkim,	Article
	Battacharjee D.	and Applications			India; Jadavpur University, 188, Raja S.C.	Article
					Mallick Rd, West Bengal, Kolkata, 700032, India	
106					Department of Mechanical Engineering, Sikkim	
		International			Manipal Institute of Technology, Sikkim	
		Journal on			Manipal University, Sikkim, Majitar, India;	
		Interactive Design			Department of Production Engineering,	
	Das P.P., Tiwary A.P.,	and Manufacturing			Jadavpur University, West Bengal, Kolkata,	
	Chakraborty S.				India	Article
107	Digal G., Atungbou N.	Contemporary			Council for Social Development, Hyderabad,	Article
	Digai O., Atalignou IV.	Voice of Dalit			Telangana, Rajendranagar, India; Department	Aiticic

				of Humanities and Social Sciences, Sikkim	
				Manipal University, Sikkim, Gangtok, India	
108				Department of Physics, Sikkim Manipal	
				Institute of Technology, Sikkim Manipal	
				University, Majitar, East Sikkim, Sikkim737136,	
	D 0 11 01 11 1			India; Department of Physics, Manipal Institute	
	Das S.K., Chettri B.,			of Technology, MAHE, Karnataka, Bengaluru,	
	Chettri P., Deka U.,			560064, India; Department of Physics, NIT	
	Mukherjee V., Sharma			Durgapur, West Bengal713209, India;	
	B.			Department Electronics and Communication	
				Engg, Sikkim Manipal Institute of Technology,	
		Materials Today:		Sikkim Manipal University, Majitar, East Sikkim,	
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109	Davi D. Cardian C. Dhan	IETE lavoral of		Department of ECE, Sikkim Manipal Institute of	
	Roy R., Sarkar S., Dhar	IETE Journal of		Technology, Sikkim Manipal University,	Article
	S.	Research		Majitar, India	
110				Department of Computer Science, University of	
				Ilorin, Ilorin, Nigeria; Department of	
				Mathematical Sciences, Olabisi Onabanjo	
				University, Ago-Iwoye, Nigeria; Department of	
				Computer Science and Engineering, Birla	
				Institute of Technology, Jharkhand, Mesra,	
				India; Department of Electrical and Electronics	
		International Series		Engineering, Sikkim Manipal Institute of	
	Awotunde J.B.,	in Operations		Technology (SMIT), Sikkim Manipal University	
	Oluwabukonla S.,	Research and		(SMU), Sikkim, Majitar, India; Department	
	Chakraborty C., Bhoi	Management		Agricultural Extension and Rural Development,	Book
	A.K., Ajamu G.J.	Science	320	Landmark University, Omu-Aran, Nigeria	Chapter

111				Department of Information Technology, North	
				Eastern Hill University, Meghalaya, Shillong,	
				793022, India; Department of Electronics and	
	Hazarika R.A., Maji			Communication Engineering, Sikkim Manipal	
	A.K., Syiem R., Sur	Journal of Digital		Institute of Technology, Sikkim Manipal	
	S.N., Kandar D.	Imaging		University, Sikkim, Majitar, 737136, India	Article
112				Department of Electronics and Communication	
				Engineering, Sikkim Manipal Institute of	
				Technology, Sikkim Manipal University, Sikkim,	
				East Sikkim, 737136, India; Institute of Radio	
	Das S., Chattopadhyay			Physics and Electronics, University of Calcutta,	
	A., Tewari S.	Silicon		West Bengal, Kolkata, 700009, India	Article
113				Information Technology Collage, Imam Ja'afar	
				Al-Sadiq University, Baghdad, Iraq; Department	
				of Mathematics, Sikkim Manipal Institute of	
		European Physical		Technology, Sikkim Manipal University,	
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114	Kiran S., Poudyal A.,	Lecture Notes in		Sikkim Manipal Institute of Technology, Sikkim, C	Conference
	Pradhan S., Gautom	Civil Engineering	205		Paper
	M.	Civil Eligilleerilig		iviajilitai, iliula	rapei
115				Department of Environmental Science, School	
				of Basic Sciences and Research, Sharda	
				University, Uttar Pradesh, Greater Noida, India;	
				Department of Environmental Science, School	
				of Earth Sciences, Central University of	
				Rajasthan, Rajasthan, Ajmer, India; Sikkim	
	Sharma R.K., Kumar			State Council of Science and Technology,	
	R., Pradhan P.,			Vigyan Bhawan, Sikkim, Gangtok, Deorali,	Book
	Sharma A.	Springer Climate		India; Department of Computer Applications,	Chapter

116	Saha S.K., Adhikary A., Jha A.	European Physical Journal: Special Topics		Sikkim Manipal Institute of Technology, Sikkim, Majitar, India Department of Management Studies, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India	Article
117	Verma U., Sohani M., Borah S., Nagwanshi K.K., Pathak S.	Lecture Notes on Data Engineering and Communications Technologies	86	SVKM's NMIMS University, MPSTME Shirpur Campus, Maharashtra, Shirpur, 425405, India; Sikkim Manipal Institute of Technology, Sikkim, East Sikkim, Majitar, Rangpo, 737132, India; Department of Computer Science & Engineering, Amity School of Engineering & Technology, Amity University Rajasthan, Jaipur, India	Book Chapter
118	Borah S., Mishra S.K., Mishra B.K., Balas V.E., Polkowski Z.	Lecture Notes on Data Engineering and Communications Technologies	86	Sikkim Manipal University Majhitar, Sikkim, Rangpo, India; GIET University, Odisha, Gunupur, India; Jan Wyzykowski University, Polkowice, Poland; Gandhi Institute for Education and Technology, Odisha, Bhubaneswar, India; Department of Automatics and Applied Software, Aurel Vlaicu University, Arad, Romania	Editorial
119	Mishra J.P., Polkowski Z., Mishra S.K., Borah S.	Lecture Notes on Data Engineering and Communications Technologies	86	Gandhi Institute for Education and Technology, Affiliated to Biju Patnaik University of Technology, Rourkela, Baniatangi, Bhubaneswar, India; Wroclaw University of Economics and Business, Wroclaw, Poland; Sikkim Manipal Institute of Technology, East Sikkim, Majitar, India	Book Chapter

120	Borah S., Singh N.K., Yolmo P.U., Kumar R., Panigrahi R.	Lecture Notes on Data Engineering and Communications Technologies	86	Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India	Book Chapter
121	Ray J.K., Biswas A.S., Sil S., Bera R., Shome S., Biswas P., Mitra M.	Innovations in Systems and Software Engineering		Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Majitar, East Sikkim, 737136, India; Department of Electronics and Telecommunication, IIEST, Shibpur, Botanical Garden Road, West Bengal, Howrah, 7111103, India; Department of Electronics and Communication Engineering, Calcutta Institute of Engineering and Management, 24/1A Chandi Ghosh Road, Tollygunge, West Bengal, Kolkata, 700040, India; Department of Electronics and Communication Engineering, St. Mary's Technical Campus Kolkata, Ichapur Nilgunge Gram Panchayat, Barasat, West Bengal, Kolkata, 700126, India	Article
122	Kumar H., Kumar G., Singh S., Paul S.	Smart Innovation, Systems and Technologies	269	Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Gangtok, India	Conference Paper
123	Passah A., Sur S.N., Paul B., Kandar D.	IEEE Access	10	Department of Information Technology, North- Eastern Hill University, Meghalaya, Shillong, India; Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal	Article

				University, Sikkim, Rangpo, India; Institute for Intelligent Systems, University of Johannesburg, Johannesburg, South Africa	
124	Islam H., Das S., Ali T., Bose T., Kumari S.,			Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India; Department of Electronics and Communication, Manipal Institute of Technology, Manipal Academy of Higher Education, Manipal, India; Department of Electronics Engineering, University Polytechnic, Birla Institute of Technology, Jharkhand, India; ECE Department, Sri Venkateswara College of Engineering and Technology, Andhra Pradesh, India; Discipline of Electrical, Electronic and Computer Engineering, University of KwaZulu-Natal,	
	Prakash O., Kumar P.	IEEE Access	10		rticle
125	Das S., Sharma B.	Silicon		Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, PIN 737136, India	rticle
126	Zaman G.S., Al- Saleem Alshahrani S.A.S., Laskar N.B., Hadadi I., Alelyani M., Adam M., Babiker M.,	International Journal of General Medicine	15	Department of Clinical Laboratory Sciences, College of Applied Medical Sciences, King Khalid University, Abha, Saudi Arabia; Family & Community Department, College of Medicine, King Khalid University, Abha, Saudi Arabia; Department of Community Medicine, Sikkim	rticle

	Musa M.J., Barua P.,		Manipal Institute of Medical Sciences, Sikkim,	
	Mohammed M.E.A.		India; Department of Radiological Sciences,	
			College of Applied Medical Sciences, King	
			Khalid University, Abha, Saudi Arabia;	
			Department of Clinical Biochemistry, College of	
			Medicine, King Khalid University, Abha, Saudi	
			Arabia; Department of Radiology, College of	
			Applied Medical Sciences, Jeddah University,	
			Jeddah, Saudi Arabia; Department of Statistics,	
			J.B. College, Assam, Jorhat, India; Department	
			of Chemistry, Faculty of Science, King Khalid	
			University, Abha, Saudi Arabia	
127			Department of Computer Applications, Sikkim	
			Manipal Institute of Technology, Sikkim	
			Manipal University, Sikkim, Majitar, 737136,	
			India; Department of Computer Engineering,	
			Sikkim Institute of Science and Technology,	
			South Sikkim, Jorethang, India; Department of	
			Medicine, Sikkim Manipal Institute of Medical	
			Sciences, Sikkim Manipal University, Sikkim,	
			Gangtok, 737102, India; Department of	
			Computer Science and Engineering, Sikkim	
			Manipal Institute of Technology, Sikkim	
			Manipal University, Sikkim, Majitar, 737136,	
			India; Institute of Information Science and	
			Technologies, National Research Council, Pisa,	
		Journal of Ambient	56124, Italy; KIET Group of Institutions, Delhi-	
	Pramanik M., Pradhan	Intelligence and	NCR, Ghaziabad, 201206, India; AB-Tech	
	R., Nandy P., Bhoi	Humanized	eResearch (ABTeR), Burla, Sambalpur, 768018,	
	A.K., Barsocchi P.	Computing	India	Article

128			Department of Aerospace Engineering and Applied Mechanics, Indian Institute of Engineering Science and Technology, Shibpur, West Bengal, Howrah, India; Department of	
			Computer Science and Engineering, Sikkim	
			Manipal Institute of Technology (SMIT), Sikkim Manipal University (SMU), Sikkim,	
			Gangtok, India; School of Mechatronics and	
			Robotics, Indian Institute of Engineering	
			Science and Technology, Shibpur, Howrah,	
			India; Department of Aerospace Engineering	
			and Applied Mechanics, Indian Institute of	
			Engineering Science and Technology, Shibpur,	
			Howrah, India; Department of Instrumentation	
	Roy G., Bhoi A.K., Das	Signal, Image and	Engineering, Central Institute of Technology,	
	S., Bhaumik S.	Video Processing	Assam, Kokrajhar, India	Article
129			Department of Mechanical Engineering, Sikkim	
		International	Manipal Institute of Technology, Sikkim	
		Journal on	Manipal University, Sikkim, Majitar, India;	
		Interactive Design	Department of Production Engineering,	
	Das P.P., Chakraborty	and Manufacturing	Jadavpur University, West Bengal, Kolkata,	
100	S.		India	Article
130		International	Department of Electrical and Electronics	
		Journal of	Engineering, Sikkim Manipal Institute of	
	Subba R.,	Management	Technology, Sikkim Manipal University, India	Article
	Shabbiruddin	Science and		
		Engineering		
		Management		

131						Sikkim Manipal Institute of Medical Sciences, Sikkim Manipal University, India; Centre for Clinical Anatomy, University of Bristol, United	
	Lama P., Tewari J.,					Kingdom; Biomolecular Science Research	
	Adams M.A., Maitre	Histology and				Centre, Sheffield Hallam University, United	
	C.L.	Histopathology	37	1		Kingdom	Article
132						Department of Electrical and Electronics	
						Engineering, Sikkim Manipal Institute of	
						Technology, Sikkim Manipal University,	
						Gangtok, 737136, India; Department of	
						Electrical Engineering, Manipal University	
						Jaipur, Jaipur, 303007, India; Department of	
						Electrical & Electronics Engineering, Manipal	
						Institute of Technology, Manipal Academy of	
						Higher Education, Manipal, 576104, India;	
						Department of Electrical Engineering, College	
						of Engineering, King Saud University, Riyadh,	
						11421, Saudi Arabia; BEARS, NUS Campus,	
	Shabbiruddin, Kanwar					University Town, Singapore, 138602,	
	N., Jadoun V.K.,					Singapore; Department of Electrical and	
	Alotaibi M.A., Malik					Computer Engineering, University of Waterloo,	
	H., Nassar M.E.	Energies	15	1	58	Waterloo, ON N2L 3G1, Canada	Article
133	Handinus M. Dussad	Lecture Notes in				Assam University, Assam, Silchar, 788011,	Conference
	Handique M., Prasad	Networks and	281			India; Sikkim Manipal Institute of Technology,	
	A., Sarma H.K.D.	Systems				Sikkim, Rangpo, 737136, India	Paper
134						Health Data Analytics & Visualization	
	Chavan N., Ranjan P.,					Environment, Amity Institute of Public Health,	
	Kumar U., Shrivastav	Lecture Notes in				Amity University Uttar Pradesh, Sector 125,	
	K.D., Sarma H.K.D.,	Networks and				Noida, India; SRM University, Neerukonda,	Conference
	Janardhanan R.	Systems	281			Mangalagiri Mandal Guntur District, Andhra	Paper

				Pradesh, Mangalagiri, 522502, India; Delhi State Cancer Institute, Dilshad Garden, Delhi, India; Department of Information Technology, Sikkim Manipal Institute of Technology, East Sikkim, Majitar, 737136, India; Laboratory of Disease Dynamics & Molecular Epidemiology, Amity Institute of Public Health, Amity University Uttar Pradesh, Sector 125, Noida, India	
135	Pradhan P.K., Baruah U. Mohanty S., Anand R., Dutta A., Kumar V., Kumar U., Islam M.R.	Lecture Notes in Networks and Systems Lecture Notes in Networks and Systems	281	Centre for Computers and Communication Technology, South Sikkim, Chisopani, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Sikkim Manipal University, East Sikkim, Majitar, India Department of Computer Science and Engineering, Sikkim Manipal Institute of	Conference Paper Conference Paper
137	Dhakal D., Rathor M., Dey S., Dey P., Sharma K.	Lecture Notes in Networks and Systems	281	l Majitar, Rangno, India	Conference Paper
138	Dey A.J., Sarma H.K.D.	Lecture Notes in Networks and Systems	281		Conference Paper
139	Subba T., Chingtham T.S.	Lecture Notes in Networks and Systems	281	Technology SMII Sikkim Majitar India	Conference Paper

140	Borah N., Baruah U.	Lecture Notes in Networks and Systems	281	Maninal Institute of Technology Sikkim	Conference Paper
141	Sharma A., Islam M.R., Ningombam D.	Lecture Notes in Networks and Systems	281	Department of Computer Science and Engineering, Sikkim Manipal Institute of	Conference Paper
142	Sapkota K., Shabbiruddin, Sherpa K.S.	Lecture Notes in Networks and Systems	281	Technology, Sikkim Manipal University, Sikkim,	Conference Paper
143	Sarma H.K.D.	Lecture Notes in Networks and Systems	281	Manipal Institute of Technology, Sikkim.	Conference Paper
144	Jha A., Banerjee P., Jha A.	Lecture Notes in Networks and Systems	281	, , , , , , , , , , , , , , , , , , , ,	Conference Paper
145	Adarsh A., Tamang T.L., Pradhan P., Singh V.K., Sen B., Sharma K.	Lecture Notes in Networks and Systems	281	3, 3, 3, 3,	Conference Paper
146	Ningthoujam C., Chingtham T.S.	Lecture Notes in Networks and Systems	281	Department of Computer Science and Engineering, Sikkim Manipal Institute of	Conference Paper

147	Raju R.S., Gurung S., Rai P.	Lecture Notes in Networks and Systems	281	Sikkim Manipal Institute of Technology, Sikkim, Majitar, India	Conference Paper
148	Mohapatra S., Goswami A., Singh A., Singh V.K., Sen B., Sharma K.	Lecture Notes in Networks and Systems	281	Department of Computer Science & Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India	Conference Paper
149	Abiodun M.K., Adeniyi E.A., Awotunde J.B., Bhoi A.K., AbdulRaheem M., Oladipo I.D.	EAI/Springer Innovations in Communication and Computing		Department of Computer Science, Landmark University, Omu- Aran, Nigeria; Department of Computer Science, University of Ilorin, Ilorin, Nigeria; Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Majitar, India	Book Chapter
150	Nguyen MS.V., Sur S.N., Do DT.	EAI/Springer Innovations in Communication and Computing		Faculty of Electronics Technology, Industrial University of Ho Chi Minh City (IUH), Ho Chi Minh City, Viet Nam; Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majitar, Sikkim, India; Department of Computer Science and Information Engineering, Asia University, Taichung, Taiwan	Book Chapter
151	Oladipo I.D., AbdulRaheem M., Awotunde J.B., Bhoi A.K., Adeniyi E.A., Abiodun M.K.	EAI/Springer Innovations in Communication and Computing		Department of Computer Science, University of Ilorin, Ilorin, Nigeria; Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Majitar, India; Department of Computer Science, Landmark University, Omu-Aran, Nigeria	Book Chapter

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152					Faculty of Electronics Technology, Industrial	
					University of Ho Chi Minh City (IUH), Ho Chi	
					Minh City, Viet Nam; Department of	
					Electronics and Communication Engineering,	
					Sikkim Manipal Institute of Technology, Sikkim	
		EAI/Springer			Manipal University, Majitar, Sikkim, India;	
		Innovations in			Department of Computer Science and	
	Nguyen MS.V., Sur	Communication			Information Engineering, Asia University,	Book
	S.N., Do DT.	and Computing			Taichung, Taiwan	Chapter
153		Australian Journal			Sikkim Manipal Institute Of Technology,	
	Kumari R., Pandit M.,	of Electrical and	10	1	Majhitar, India; Sikkim Manipal Institute Of	Articlo
	Sherpa K.S.	Electronics	19	1	Technology, Majhitar, India; Sikkim Manipal	Article
		Engineering			University, Gangtok, India	
154					Department of Electronics and Communication	
					Engineering, Sikkim Manipal Institute of,	
					Technology Sikkim Manipal University, Sikkim,	
					Majitar, India; Department of Computer	
					Science and Engineering, Sikkim Manipal	
					Institute of Technology, Sikkim Manipal	
					University, Sikkim, Majitar, India; Department	
					of Automatics and Applied Software, Faculty of	
		EAI/Springer			Engineering, Aurel Vlaicu University of Arad,	
		Innovations in			Arad, Romania; Faculty of Information	
	Sur S.N., Balas V.E.,	Communication			Technology, Duy Tan University, Da Nang, Viet	
	Bhoi A.K., Nayyar A.	and Computing			Nam	Editorial
155					Sikkim Manipal Institute of Technology, Sikkim	
	Dahal D. Charres C.D.	Lastuma Natas :			Manipal University, Sikkim, Gangtok, 737136,	Conforme
	Dahal P., Sharma G.P.,		188		India; Manipal School of Architecture and	Conference
	Patil S.	Civil Engineering			Planning, Manipal Academy of Higher	Paper
					Education, Manipal, 576104, India	

156		International			Department of Computer Applications, Si	kkim
130	Borah S.	Journal of	14	1	Manipal University, Sikkim, 737136, India	Editorial
	Duran 3.	Biometrics	14		ivianipai Oniversity, Sikkiiri, 737130, india	Euitoriai
157	Arunachalam P., Janakiraman N., Sivaraman A.K.,	Biometrics			Department of Electronics and Communication, K.L.N. College of Enginee Madurai, 630612, India; School of Compu Science and Engineering, Vellore Institute Technology (VIT), Chennai, 600127, India; School of Computer Science and Engineer Centre for Cyber Physical Systems, Vellore	ter of ing,
	Balasundaram A., Vincent R., Rani S., Dey B., Muralidhar A., Rajesh M.	Intelligent Automation and			Institute of Technology (VIT), Chennai, 60 India; Department of Computer Science a Engineering, Gulzar Group of Institutions, Khanna, 141401, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Sikkim Manipal	0127, nd
		Soft Computing	32	2	University, Sikkim, 737136, India	Article
158	Toppo B., Oraon M., Roy M.K.	Lecture Notes in Mechanical Engineering			Sikkim Manipal Institute of Technology, Majitar, East Sikkim, 737136, India; Birla Institute of Technology, Mesra, Ranchi, 835215, India	Conference Paper
159	Dutta N., Jadav N., Tanwar S., Sarma	Studies in Computational			Department of Computer Science and Engineering, SRM University, Mangalagiri, Andhra Pradesh, India; Department of Computer Science and Engineering, Institute Technology, Nirma University, Ahmedaba Gujarat, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Majitar, Sikkim, India; Autom	ute of d,
	H.K.D., Pricop E.	Intelligence	995		Control, Computers and Electronics	Chapter

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				Ploiesti, Ploiești, Romania	
160				Department of Computer Science and	
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				Andhra Pradesh, India; Department of	
				Computer Science and Engineering, Institute o	:
				Technology, Nirma University, Ahmedabad,	
				Gujarat, India; Department of Information	
				Technology, Sikkim Manipal Institute of	
				Technology, Majitar, Sikkim, India; Automatic	
	Dutta N., Jadav N.,	Studies in		Control, Computers and Electronics	
	Tanwar S., Sarma	Computational		Department, Petroleum-Gas University of	Book
	H.K.D., Pricop E.	Intelligence	995	Ploiesti, Ploieşti, Romania	Chapter
161				Department of Computer Science and	
				Engineering, SRM University, Mangalagiri,	
				Andhra Pradesh, India; Department of	
				Computer Engineering, Institute of Technology	,
				Nirma University, Ahmedabad, Gujarat, India;	
				Department of Computer Science and	
				Engineering, Institute of Technology, Nirma	
				University, Ahmedabad, Gujarat, India;	
				Department of Information Technology, Sikkin	
				Manipal Institute of Technology, Majitar,	
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162				Department of Computer Science and	
	Dutta N., Jadav N.,	Studies in		Engineering, SRM University, Mangalagiri,	
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163				Technology, Nirma University, Ahmedabad, Gujarat, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Majitar, Sikkim, India; Automatic Control, Computers and Electronics Department, Petroleum-Gas University of Ploiesti, Ploieşti, Romania	
103	Dutta N., Jadav N., Tanwar S., Sarma H.K.D., Pricop E.	Studies in Computational Intelligence	995	Department of Computer Science and Engineering, SRM University, Mangalagiri, Andhra Pradesh, India; Department of Computer Engineering, Institute of Technology, Nirma University, Ahmedabad, Gujarat, India; Department of Computer Science and Engineering, Institute of Technology, Nirma University, Ahmedabad, Gujarat, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Majitar, Sikkim, India; Automatic Control, Computers and Electronics Department, Petroleum-Gas University of Ploiesti, Ploiesti, Romania	Book Chapter
164	Dutta N., Jadav N., Tanwar S., Sarma H.K.D., Pricop E.	Studies in Computational Intelligence	995	Department of Computer Science and Engineering, SRM University, Mangalagiri, Andhra Pradesh, India; Department of Computer Science and Engineering, Institute of Technology, Nirma University, Ahmedabad, Gujarat, India; Department of Information Technology, Sikkim Manipal Institute of Technology, Majitar, Sikkim, India; Automatic Control, Computers and Electronics	Book Chapter

				Department, Petroleum-Gas University of	
				Ploiesti, Ploiești, Romania	
165				Department of Computer Science and	
				Engineering, SRM University, Mangalagiri,	
				Andhra Pradesh, India; Department of	
				Computer Science and Engineering, Institute of	
				Technology, Nirma University, Ahmedabad,	
				Gujarat, India; Department of Information	
				Technology, Sikkim Manipal Institute of	
				Technology, Majitar, Sikkim, India; Automatic	
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	Tanwar S., Sarma	Computational		Department, Petroleum-Gas University of	Book
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166				Department of Computer Science and	
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				Andhra Pradesh, India; Department of	
				Computer Science and Engineering, Institute of	
				Technology, Nirma University, Ahmedabad,	
				Gujarat, India; Department of Information	
				Technology, Sikkim Manipal Institute of	
l				Technology, Majitar, Sikkim, India; Automatic	
	Dutta N., Jadav N.,	Studies in		Control, Computers and Electronics	
	Tanwar S., Sarma	Computational		Department, Petroleum-Gas University of	Book
	H.K.D., Pricop E.	Intelligence	995	Ploiesti, Ploiești, Romania	Chapter
167				Department of Computer Science and	
				Engineering, SRM University, Mangalagiri,	
				Andhra Pradesh, India; Department of	
	Dutta N., Jadav N.,	Studies in		Computer Engineering, Institute of Technology,	
	Tanwar S., Sarma	Computational		Nirma University, Ahmedabad, Gujarat, India;	Book
	H.K.D., Pricop E.	Intelligence	995	Department of Computer Science and	Chapter

					Engineering, Institute of Technology, Nirma	
					University, Ahmedabad, Gujarat, India;	
					Department of Information Technology, Sikkim	
					Manipal Institute of Technology, Majitar,	
					Sikkim, India; Automatic Control, Computers	
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					and Electronics Department, Petroleum-Gas	
1.00	NA I la de CIV	1.1			University of Ploiesti, Ploiesti, Romania	
168	Mukherjee S.K.,	International	40	_	Sikkim Manipal University, India; The Institute	
	Kumar J., Pareek S.K.,	Journal of e-	18	1	of Cost Accountants of India, India; Sikkim	Article
1.50	Jha A.K.	Collaboration			Manipal Institute of Technology, India	
169					Department of Electronics and Communication	
					Engineering, TINT, New Town, Kolkata, India;	
					Department of Electronics and Communication	
					Engineering, CIEM, Kolkata, India; Department	
					of Electronics and Communication Engineering,	
		Lecture Notes in			SMIT, Rangpo, Sikkim, India; Department of	
	Biswas A.S., Sil S.,	Electrical			Electronics and Telecommunication	Conference
	Bera R., Mitra M.	Engineering	786		Engineering, IIEST, Shibpur, Howrah, India	Paper
170					Department of Management Studies, Sikkim	
					Manipal Institute of Technology, Sikkim	
	Jha A., Bhoi A.K., Saha				Manipal University, Sikkim, Majitar, India;	
	S.K., Singh A.,				Department of Electrical and Electronics	
	Mukherjee S., Sharma	EAI/Springer			Engineering, Sikkim Manipal Institute of	
	B., Jayarani	Innovations in			Technology, Sikkim Manipal University, Sikkim,	
		Communication			Majitar, India; Symbiosis Institute of Health	Book
		and Computing			Sciences, Pune, India	Chapter
171		EAI/Springer			Department of Management Studies, Sikkim	-
	Saha S.K., Jha A., Bhoi	Innovations in			Manipal Institute of Technology, Sikkim	
	A.K., Singh A., Kumar	Communication			Manipal University, Sikkim, India; Department	Book
	J., Rani J.	and Computing			of Electrical and Electronics Engineering, Sikkim	Chapter

				Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Majitar, India; Symbiosis Institute of Health Sciences, Pune, India	
172	Bera R.	Lecture Notes in Electrical Engineering	794	Department of Electronics & Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majitar, Rangpo, East Sikkim, Sikkim, 737136, India	Book Chapter
173	Dutta R., Paitya N.	Lecture Notes in Electrical Engineering	794	Center of Intelligent Systems and Robotics - ITER, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, 751030, India; Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, 737136, India	Book Chapter
174	Das S.D., Biswas A., Bhattacharjee R., Gupta S., Dey B.	Lecture Notes in Electrical Engineering	776	Electronics and Communication Engineering Department, Sikkim Manipal Institute of Technology, Gangtok, Sikkim, India	Conference Paper
175	Tamang J.S., Jha S.K., Dhar R.S., Chatterjee S.	Lecture Notes in Electrical Engineering	776	Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology (SMIT), Sikkim Manipal University (SMU), Majitar, Sikkim, 737136, India; Department of Electronics and Communication Engineering, National Institute of Technology, Aizwal, Mizoram, 796012, India	Conference Paper
176	Sharma P., Sur S.N.	Lecture Notes in Electrical Engineering	776	Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majitar, Rangpo, East Sikkim, 737136, India	Conference Paper

177	Rai P., Pradhan N., Pokhrel K.	Lecture Notes in Electrical Engineering	776	Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Gangtok, Sikkim, India; Department of Electronics and Communication Engineering Sikkim, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Gangtok, Sikkim, India	Conference Paper
178	Biswas A., Paudel B., Sarkar N.	Lecture Notes in Electrical Engineering	776	Electronics and Communication Engineering Department, Sikkim Manipal Institute of Technology, Sikkim, India	Conference Paper
179	Singh J., Garg K., Kumar N., Sharma B.	Lecture Notes in Electrical Engineering	776	Department of Mechanical Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal Univeristy, Gangtok, Sikkim, 737136, India; Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal Univeristy, Gangtok, Sikkim, 737136, India; Department of Electronics and Communiation Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal Univeristy, Gangtok, Sikkim, 737136, India	Conference Paper
180	Le CB., Do DT., Sur S.N.	Lecture Notes in Electrical Engineering	776	Faculty of Electronics Technology, Industrial University of Ho Chi Minh City, Ho Chi Minh City, Viet Nam; Department of Computer Science and Information Engineering, College of Information and Electrical Engineering, Asia University, Taichung city, Taiwan; Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim	Conference Paper

				Manipal University, Majitar, Sikkim, 737136,	
				India	
181				Department of Electronics and Communication	
				Engineering, Surendra Institute of Engineering	
				and Management, Maulana Abul Kalam Azad	
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				Bengal, India; Department of Electronics and	
		Lecture Notes in		Communication Engineering, Sikkim Manipal	
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	Dutta R., Paitya N.	Engineering	776	University, Gangtok, Sikkim, India	Paper
182	Thapa A., Pradhan	Lecture Notes in		Department of Electronics & Communication	Conference
	P.C., Sharma B.	Electrical	776	Engineering, SMIT, SMU, Majitar, India	Paper
	P.C., Silalilla B.	Engineering			Рареі
183	Roy R., Sarkar S., Dhar	Lecture Notes in		Department of ECE, Sikkim Manipal University,	Conference
	S.	Electrical	776	Sikkim, India	
	3.	Engineering		SIRKIIII, IIIUId	Paper
184				Department of Electronics and Communication	
				Engineering Sikkim, Manipal Institute of	
				Technology, Rangpo, Sikkim, India; Electronics	
				and Communications Engineering Department	
				Sikkim Manipal Institute of Technology,	
				Rangpo, India; School of Engineering (E6B1.11,	
				Macquarie University, Sydney, NSW, Australia;	
	Dhar S.,	Lecture Notes in		Department of Computer Science and	
	Mukhopadhyay S.C.,	Electrical		Information Engineering, National Taipei	
	Sur S.N., Liu CM.	Engineering	776	University of Technology, Taipei, Taiwan	Editorial
185		Lastura Natas in		Department of Computer Science and	
	Sharma A., Gautam	Lecture Notes in	776	Engineering, Sikkim Manipal Institute of	Conference
	K., Koirala T.K.	Electrical	776	Technology, Sikkim Manipal University,	Paper
		Engineering		Gangtok, India	

186	Paudel B., Sarkar N., Chaktraborty S.	Lecture Notes in Electrical Engineering	776	Sikkim Manipal Institute of Technology, Sikim Manipal University, Majitar, Sikkim, 737132, India	Conference Paper
187	Mittal S., Ranjan A., Roy B., Rathore V.	Lecture Notes in Electrical Engineering	776	Sikkim Manipal Institute of Technology, SMU, Gangtok, Sikkim, India	Conference Paper
188	Roy B., Gupta M., Kumar A., Sweta	Lecture Notes in Electrical Engineering	776	Sikkim Manipal Institute of Technology, SMU, East Sikkim, India; UG Student, Sikkim Manipal Institute of Technology, SMU, East Sikkim, India	Conference Paper
189	Kumari R., Pandit M., Sherpa K.S.	Lecture Notes in Electrical Engineering	776	Electrical and Electronics Engineering Department, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India	Conference Paper
190	Upadhyaya B., Sharma K., Gurung S.	Lecture Notes in Electrical Engineering	776	Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India	Conference Paper
191	Singh A., Kumar J., Jha A., Purbey S.	Lecture Notes in Electrical Engineering	776	Symbiosis Institute of Health Sciences, Symbiosis International (Deemed University), Pune, Maharashtra, India; Department of Management Studies, Sikkim Manipal Institute of Technology, Majhitar, Sikkim, India; Development Management Institute, Patna, Bihar, India	Conference Paper
192	Kumar N., Dey B., Chetri C., Agarwal A., Debnath A.	Lecture Notes in Electrical Engineering	776	SMIT, SMU, Gangtok, Sikkim, India; CMRIT, Bangalore, Karnataka, India	Conference Paper
193	Sapkota B.P., Das S.K., Mukherjee V., Kabi S.	Lecture Notes in Electrical Engineering	776	Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majhitar, Rangpo, East Sikkim, Sikkim, 737136, India	Conference Paper

194	Chatterjee S., Banerjee R.	Lecture Notes in Electrical Engineering	776		EEE Department, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Gangtok, India; EE Department, NIT Silchar, Silchar, India	Conference Paper
195	Islam H., Bose T., Das S.	Lecture Notes in Electrical Engineering	776		Department of Electronics and Communication Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, India	Conference Paper
196	Sharma R., Ch Gogoi K., Chatterjee S.	Lecture Notes in Electrical Engineering	776		EEE Department, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Majitar, Sikkim, 737136, India	Conference Paper
197	Ray J.K., Sil S., Bera R., Biswas P., Biswas A.S., Alfred Q.M.	Lecture Notes in Networks and Systems	292		Sikkim Manipal Institute of Technology, Rangpo, Sikkim, India; A.K. Choudhury School of Information Technology, University of Calcutta, Kolkata, India; IIEST Shibpur, Howrah, India; Aliah University, Kolkata, India	Conference Paper
198	Banerjee P.	Natural Hazards	110	2	Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Sikkim Manipal University, Sikkim, Majitar, 737136, India	Article
199	Chakraborty S., Verma P., Paudel B., Shukla A., Das S.	IEEE Geoscience and Remote Sensing Letters	19		Electronics and Communication Engineering Department, Sikkim Manipal Institute of Technology, Gangtok, India; Space Applications Centre, Indian Space Research Organization, Ahmedabad, India; Department of Astronomy, Astrophysics and Space Engineering, IIT Indore, Indore, India	Article
200	Das S., Chattopadhyay A., Tewari S.	IETE Technical Review (Institution	39	2	Department of Electronics and Communication Engineering, Sikkim Manipal Institute of	Article

		of Electronics and			Technology, Sikkim Manipal University, Sikkim,	
		Telecommunication			737136, India; Institute of Radio Physics and	
		Engineers, India)			Electronics, University of Calcutta, 92 Acharya	
					Prafulla Chandra Road, Kolkata, 700009, India	
201	Das S., Guha S.,				Department of Mechanical Engineering, Sikkim Manipal Institut	te of Techno
	Ghadai R., Sharma A.,				Majitar, 737136, India; School of Mechanical Engineerin	ig, KIIT Unive
	Chatterjee S.	Silicon	14	1		
202	Chase B. Bradhan C. International			Department of Electrical and Electronics Engineering, Sikkim M	anipal Institu	
	Ghose D., Pradhan S., Shabbiruddin	Journal of Ambient	43	1		
	Silabbiluuulii	Energy				

Funding for Project by International Organisation21-22:

Sl No	Name of the Scheme/Project/ Endowments/ Chairs	Name of the Principal Investigator/ Co Investigator (if applicable)	Name of the Funding agency	Funds provided (INR in lakhs)
1	FOLLOW-UP OF THE PARTICIPANTS OF IARC'	Dr. Yogesh Verma	World Health Organization	17.2367223
2	XR Program	CT Singh	META XR PROGRAM	386.75



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Sikkim Manipal University (SMU) was established in 1995 to cater to the educational and healthcare needs of the state of Sikkim and northeastern states. Till 1995, people of Sikkim use to travel to other parts of the country for their educational and healthcare needs. The establishment of SMU helped Sikkimese to pursue higher education in the state of Sikkim. People from northeastern states are aspirants of medical and paramedical programs. The University offers medical, nursing, and engineering programs relevant to the needs of the state of Sikkim and northeastern states. Today, several hundred doctors, nurses, and engineers working in different parts of India and abroad are alumni of SMU constituent units. We feel that SMU has played an instrumental role in human development in the state of Sikkim and other northeastern states contributing to the national objective of increasing the Gross Enrollment Ratio (GER).

The curricula of various programs offered by SMU include courses that are relevant to local, national, regional, and global developmental needs.

SMU offers medical and nursing programs. As part of their clinical training, students of these programs spend their learning time in teaching hospitals/



Primary Health Centre/ Urban Health Centre/Govt. Hospital interacting with patients from Sikkim.

To facilitate effective interaction between health professionals and patients, the Nepali language has been introduced as a value added course into all Medical and Nursing programs.

Compulsory course in "Eastern Himalayan Studies" for all BA Programmes provides issues revolving from the environment to economic aspects of the eastern region which not only include Sikkim & Darjeeling but also has a wider grip of nearby countries of eastern Himalaya such as Bhutan, Tibet, China and Nepal Compulsory Audit courses for all B.Tech Programme on Constitution of India

Open Elective on Entrepreneurship/Compulsory Internship/research projects for more than 90% of programmes run by the university

SMU has integrated courses related to Human Values, Ethics, Environment, and Gender studies as part of the curriculum in various programs to ensure the holistic development of students.

Human Values and Professional Ethics course is being offered as Value Added course to B.Tech. Students in their first year.



Bioethics course is being offered as Value added course to students of medical, nursing and physiotherapy programs. This course is offered jointly with UNESCO Bioethics (Haifa) Chair, Sikkim Unit.

Ethics course is being offered as part of BPT curriculum.

Professional Development & Ethics (Prepared Based Upon the guidelines of Attitude, Ethics, and Communication (AETCOM) Competencies for the Indian Medical Graduate) for MBBS Students.

Environmental Studies is being offered as a mandatory course for B.Tech, BA, B.Com. programs.

Gender & Society is being offered as part of MA Sociology

Gender Studies in Literature as part of MA English Program.

Gender Equity Programs are being conducted for all the students. Gender Champion have been identified to sensitize students university for students & for faculty

The following are the list of courses that are prepared based upon considering SDGs

Sl No	Course code	Course name	Linked to SDG
1	MAEC301	Gender Studies in Literature	SDG 5
2	BAS-E-503	Gender and Society	SDG 5
3	CH1191*	Environmental Science	SDG 6 & 7
4	CE 1407	Environmental Engineering – I	SDG 6 & 7
5	CE 1507	Environmental Engineering – II	SDG 6 & 7



6	CE 1564	Environmental Engineering Lab	SDC 6 % 7
6	CE 1564	Environmental Engineering Lab	SDG 6 & 7
7	CE 1632	Environment Impact Assessment	SDG 6 & 7
0	DA 2204	Global Economic Environment and Policy	SDC (% 7
8	BA 2204	International Business Environment	SDG 6 & 7
		and International Law & Export-	
9	BA 2446	Import Finance	SDG 6 & 7
10	CH 2435	Environmental Chemistry	SDG 6 & 7
10	C11 2433	Geographic Information Systems for	3DG (& /
11	CS 5105	Environmental Impact Assesment SDG 6 & 7	
12	MAEO304	Literature and Environment	SDG 6 & 7
13	BCAC02	Environmental Studies (AECC) SDG 6 & 7	
14	AECC –2	Environment Studies	SDG 6 & 7
15	EE 1605	Renewable Energy Systems	SDG 6 & 7
16	ME 1733	Energy Management	SDG 6 & 7
		Peace and Conflict In International	
17	MAPSC403	Politics	SDG 16
		Building Science & Concrete	
18	CE 1307	Technology	SDG 11
19	CE 1361	Planning & CA Drawing of Buildings	SDG 11
		Entrepreneurship for Engineers (In	
		collaboration with Atal Incubation	
20	BA1721	Centre)	SDG 9
21	BA 1303	Entrepreneurship and Small Business	SDG 9
22	MH2307	Entrepreneurship in healthcare	SDG 9
23	SEC- 2	Entrepreneurship Development	SDG 9
24	NR1102	Nutrition & Biochemistry	SDG 3
25	NUR303	Child Health Nursing	SDG 3
26	NR2104	Child Health Nursing(CS I)	SDG 3
27	NR2210	Child Health Nursing(CS II)	SDG 3
28	MB1101	Anatomy	SDG 3
29	MB1102	Physiology	SDG 3
30	MB1103	Biochemistry	SDG 3
31	MB1201	Pathology	SDG 3
32	MB1202	Pharmacology	SDG 3
33	MB1203	Microbiology	SDG 3
34	MB1204	FMT	SDG 3
35	MB1301	Opthalmology	SDG 3
36	MB1302	ENT	SDG 3
37	MB1303	Community Medicine	SDG 3
38	MB1401	Medicine	SDG 3
39	MB1402	Surgery	SDG 3
40	MB1403	OBGY	SDG 3
41	MB1404	Paediatrics	SDG 3
41	MB1404	raediatrics	2DQ 2



SMU provides academic flexibility through the Choice Based Credit System (CBCS)/Elective System. Constituent units lay emphasis on curriculum enrichment by introducing value-added courses relevant to the program.

Following are some highlights of the curricular aspects considering SDGs

- ➤ 83% of programs have been revised in the last 5 years.
- ➤ 89% of the courses have employability/ entrepreneurship/skill components.
- ➤ 40% of courses have been newly introduced in last 5 years.
- > 73% of SMU programs have CBCS/Elective System.
- ➤ Open Elective on Entrepreneurship/Compulsory Internship/research projects for more than 90% of programmes run by the university

Open Elective on Entrepreneurship was started to motivate student to become job giver than to become job seeker in today's world.

Description:

This course acquaints would be engineers with the foundation of business enterprise and its functional execution. It focuses on different stages related to start-up process, including business model innovation, monetization, small business management as well as strategies that improve performance of new



ventures. Centred around a blend of conceptual exploration as well as hands-on-exposure, students will develop an understanding of the benefits/advantages of being independent.

Learning Objectives:

- 1. To explore and inculcate innovative business ideas and surrounding opportunities.
- 2. To turn the market opportunities into a start-up plan.
- 3. To demonstrate understanding and application of the tools necessary to create a sustainable venture.

Orientation Modules

Introduction to Innovation: Link between changes and opportunities for launching a start-up. Current and future trends.

Entrepreneur and the Process: Critical factors for starting a new enterprise.

Opportunities for new businesses. Resource potentials. Forms of financing.

Technical Ingredients for a successful business.

Opportunity: Finalizing ideas, forming teams and brainstorming session. Projected Financial Statements: Cash flow, balance sheet, profit and loss statement.



Market Analysis: Target market. Unique selling proposition. Feasibility analysis of the competitive environment. SWOT analysis. Porter's 5 forces model to identify competitive market threats.

Business Plan: Pitching for the Business Plan. Developing a business model around the core idea. Avenues to monetization depending on the characteristics of business idea.

Intellectual Property and Legal Aspects: Understanding the Intellectual property rights when operating a business. Legal and technical aspects of the business.

Evaluation Pattern *

- 1. 100 Marks
- 2. Weightage 50 % with Internal Assessment and 50 % with External Assessment
- 3. External Assessment comprising of End Semester Examination
- 4. Allotted Credit: 2016 admitted batch 4, 2017 and onwards admitted batch –

Reference Materials

- 1. Entrepreneurship, Shikha Sahai, HPH Publishing.
- 2. Entrepreneurship Development, Gordon and Natarajan, HPH Publishing.



3. Entrepreneurship and Small Business Management, BS Bhatia & G S Bhatia,

Deep & DeepPublications Pvt Ltd

Collaboration with NGOs for SDGs



PROGRESS REPORT ON TRANSFORMING EDUCATION IN **REMOTE RURAL GOVT SCHOOLS OF SIKKIM**

A summary of activities and achievement made across the 3 adopted schools in North Sikkim -December 2021 till date









PROJECT DETAILS

PROJECT PERIOD: July 2021 – June 2024

REPROTING PERIOD: July 2021 - June 2023

PROJECT GEOGRAPHY: 3 Govt. schools in Mangan District, Sikkim

PROJECT OBJECTIVES

The project, supported by Manipal Foundation and Sikkim Manipal University, is aimed at creating access to quality and holistic learning in three adopted Govt. schools. As part of the Project, over a 3-year period, 17000ft will

- Improve infrastructure through the setup of outdoor playground to get children back to schools.
- Improve Learning Resources by setting up:
 - i. DigiLab highly specialized offline Digital Learning Solution meant for areas with no mobile connectivity, that enables children to learn in school and at home.
 - ii. Library, with average 400 books across genres, levels and languages.
- Build capabilities of Headmasters and Teachers on implementing a Blended Learning program and an Active Library program in schools
- Improve Student Learning by implementing a Structured Library program and the DigiLab program in the 3 schools.

PROJECT PROGRESS

The first two years of the Project has been devoted to

- Setting expectations with the Department of Education
- Mobilizing and sensitizing parent and the communities
- Improving infrastructure in schools through the installation of the Playground
- Contextualizing the digital learning content for the DigiLab program
- Enhancing learning resources in schools through the setup of the DigiLab and Library
- Building capacity of HM and Teachers through annual training and periodic refresher training
- Supporting the schools through quarterly monitoring visits and calls
- Maintaining the provided hardware and troubleshooting, as required









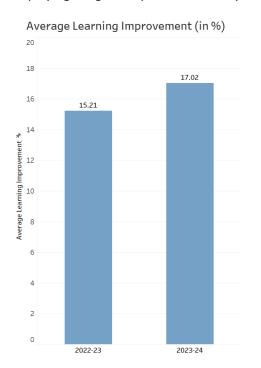


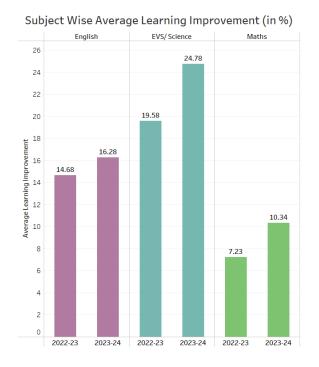
PROJECT RESULTS

DigiLab

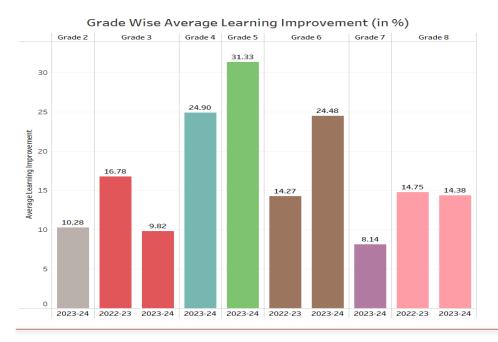
The overall **Average Learning Improvement** (ALI) across subjects is **16.63%**. In the current academic year, the overall ALI is higher (17.02%) as compared to the previous session (15.21%).

Children have demonstrated the highest learning improvement in EVS/ Science – 24.78% in the current academic year and 19.58% in the previous year. It is encouraging to see that in Maths, the children are displaying a higher improvement this year (10.34%) as against 7.23% displayed last year.





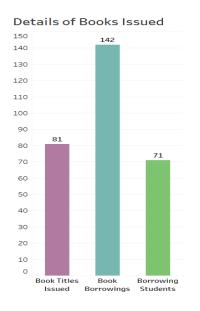
The Grade wise data for ALI is also extremely heartening as children across grades are demonstrating improvement in their learning. The data reveals that the highest Learning improvement has been achieved by children of Grade 5 followed by Grade 4 and Grade 6. There has been a marked increase in ALI for Grade 6 in the current session with an over 10% increase from the previous session.

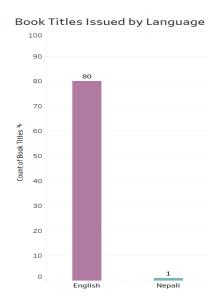




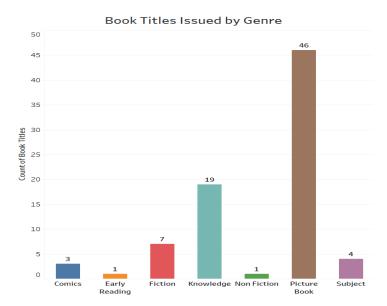
Library

It is immensely inspiring to note that children are borrowing and reading books. All the three schools have incorporated a Library period in their schedule and have allocated one period per week.



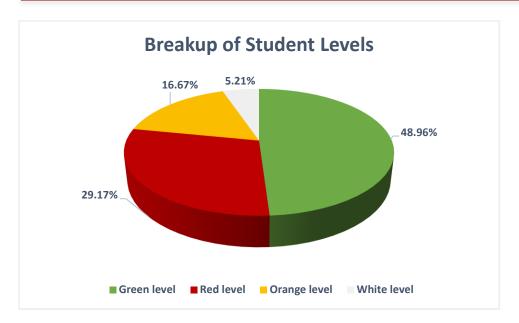


As can be seen in the above graph, a total of 81 book titles have been issued across the three schools to 71 students a total of 142 times. Almost all issued Book titles have been of English language; only 1 book in Nepali has been issued while there have no books issued in Hindi language.

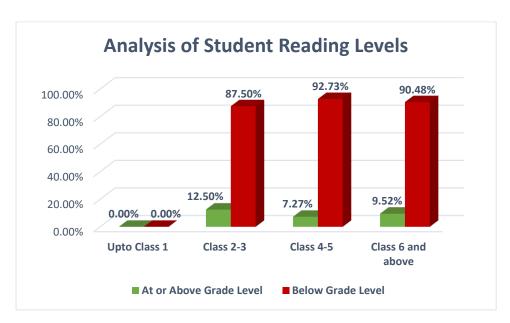


It has been observed that majority of the books issued have been Picture Books which account for 56.8% of all book titles issued, followed by Knowledge genre books which account for 23.5% of all book titles issued. Children are being encouraged to explore other genres too.





Almost half (49%) of the students across the three schools were found to be in the basic 'Green' level with close to 30% in the 'Red' level. Just under 17% were in the 'Orange' level while only a little over 5% were in the most advanced level- 'White'.



As can be seen above, the vast majority of students in the three schools are not reading at Grade level at the moment. To address this, 17000ft has conducted centralised & refresher training of HM & teachers on creating an active reading program in schools with the overall aim to inculcate a reading habit amongst children. We are confident that these measures will encourage children to read more and a larger proportion of students will start reading at Grade level.

Enrolment Updates

Even though the overall enrolment has declined in all the 3 schools, it has been observed that the overall students' attendance across grades is over 90%.



SI No	Name of School	Enrolment of Start of Year 1	
1	UPS Lingzya	36	32
2	Ups Namprick	36	32
3	SS Tingvong	65	47

CHALLENGES FACED

Over the last two years of the Project, 17000ft has faced a few challenges which have been addressed as highlighted below:

- i. Raspberry Pi stability issues: A stability issue was observed in the Raspberry Pi setup in the 3 schools, as part of the DigiLab. It was noted that due to power fluctuations, when multiple devices would try to connect to the Raspberry Pi, the Pi was unable to take the load forcing the devices to drop off automatically. This caused issues in syncing data from the DigiLab sessions. To resolve this issue, 17000ft has now provided an additional 220V transformer in these schools which is converting the load from AC to DC, thus providing stability when multiple devices attempt to connect to the Pi.
- ii. **Power Supply issues:** Inconsistent power supply causing malfunctioning in the DigiLab was a major issue reported by the schools.

 In order to counter this, 17000ft provided Top Up boxes to stabilize power supply for the DigiLab and ensure continuous and uninterrupted power supply for all devices. This step has particularly helped increase DigiLab usage in the schools.
- iii. **Delays caused due to weather vagaries:** Due to the long monsoon season causing roads to be washed out and travel practically impossible, it was not possible make monitoring visits to the schools in each quarter; hence only 3 out of the planned 4 visits could be made. In address this challenge, 17000ft has ensured support to the schools through calls/ WhatsApp.

SUPPORT PROVIDED BY SMU

Health Camps

The Central Referral Hospital Manipal, in association with 17000ft Foundation, has organised a one-day free medical health camp for the benefit of community members at:

- Lingzya Village in Dec 2021
- Namong Arithang in July 2023

The medical camps were conducted on the grounds of the schools in the villages.

Specialist doctors from various department namely General Medicine, Paediatrics, Dental and Psychiatry conducted these camps. Both the camps were well attended by students, parents and teachers. Medical examination along with free blood pressure and blood sugar were also conducted. Few of the patients were referred by the doctors for further





treatment at Central Referral Hospital Manipal. The Central Referral Hospital also gave free medical treatment to the needy patients.





Hiring of Team

Before 17000ft started its full-fledged operations in Sikkim, the Sikkim Manipal University had provided space to the 17000ft senior team for conducting candidates' interviews for the role of Program Facilitators.

17000 ft's PRESENCE IN SIKKIM

17000ft started its operations in Sikkim in July 2021 by adopting 3 Govt. schools in collaboration with Manipal Foundation and Sikkim Manipal University. Since then, 17000ft has expanded its reach and has transformed a total of 85 Govt. schools across Mangan, Pakyong and Gangtok districts and will soon be expanding to the Soreng district.

In this journey, 17000ft has been supported by Manipal Foundation & Sikkim Manipal University, Axis Bank, HT Parekh Foundation and Cipla Foundation.

PHOTOGRAPHS FROM THE GROUND







