

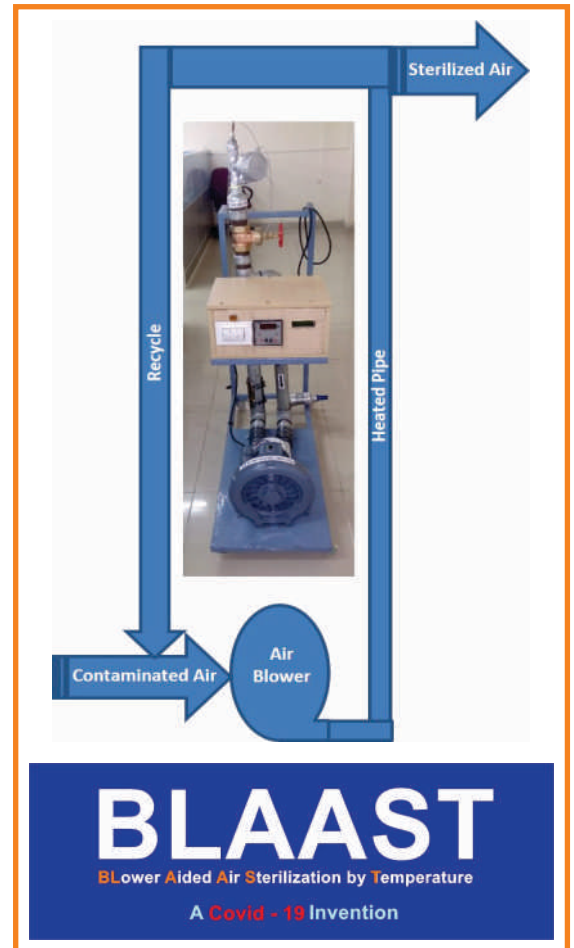
# Samvid

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## IIT Tirupati Combats Covid-19 through Tech Innovations

The entire world was taken aback with the emergence of the novel corona virus, COVID-19. With an unprecedented rate of spread, this virus put the world to a halt and made the mighty nations make some calculated and significant choices. IIT Tirupati was also affected by the nation-wide impact of virus and had to make unforeseen changes in its mode of functioning. However, despite its constraints and limitations, the Institute joined hands with the nation in combating the crisis through tech innovations. IIT Tirupati instrumentalised its technology and knowledge to orient itself as an asset in tackling this major crisis. Following are the major steps taken by IIT Tirupati in combating COVID - 19:

- Developed a prototype of thermal air sterilizer. Indian Provisional Patent is filed jointly by IIT Tirupati and Opustayz Hospitality Solutions Pvt. Ltd, Bangalore/Trivandrum. PI: Dr. T. Sunil Kumar, Department of Chemical Engineering.
- Designed and developed N95 equivalent respirator. The Institute tied-up with M/s. Amara Raja Group for mass production of the respirators. Team Members: Dr. D.V. Kiran, Dr. S.M. Maliyekkal, Prof. T.S. Natarajan, Dr. Ambrish Saxena, Prof. K.N. Satyanarayana, Dr. Ajay Kumar, and Dr. D. Subbareddy
- Proposed an attention based Deep learning-based approach for COVID Chest X-Ray image classification that classifies COVID samples with 100% recall and classifies normal, pneumonia and COVID samples with an overall accuracy of 96.3%. Team Members: Dr. Rama Krishna Gorthi, Dr. Subrahmanyam Gorthi, Mr. Gowtham, Mr. Vamshi, Mr. Arun, Ms. Vaishnavi.
- Developed a spam detection platform (<https://stop-corona-iittp.herokuapp.com/>) to flag textual/URL information as fake/misinformation message based on Machine Learning and Natural Language Processing  
Team Members: Dr. Sridhar Chimalakonda, Noble Saji Mathews
- Designed and developed an educational game called *SurviveCovid-19* (<https://survivecovid-19.itch.io/game2020>) that improves awareness of masks, sanitizers and social distancing in the theme of a city. The game is inspired by a simple pixel-based top-down style design where people navigate the city with safety and health measures and accomplish tasks such as buying groceries and medicines.  
Team Members: Dr. Sridhar Chimalakonda, Dheeraj Vagavolu, Akhila Sri Manasa Venigalla
- Designed and developed an interactive web portal named *Mood of India* (<https://moodofindia.herokuapp.com/>) to gauge mood of India during Covid-19 based on analysis of over half a million tweets with hashtags of #Corona and by using machine learning and natural language processing. Using the interactive web portal, one can find the mood of people in a



state or selected city on a specific date or date range. The portal has been used across India in states such as Rajasthan, Delhi, Punjab to understand the emotional state of people.

Team Members: Dr. Sridhar Chimalakonda, Dheeraj Vagavolu, Akhila Sri Manasa Venigalla

- Designed and developed an innovative android application named *AiR - Pollution Visualizer* (<https://bit.ly/2AQcHtP>) that uses Augmented Reality to provide an interactive experience of air pollutants in people's surroundings. The app uses data from the Central Pollution Control Board (CPCB) for over 220 stations across India and provides information on different pollutants, sources, and their impacts on health.

Team Members: Dr. Sridhar Chimalakonda, Dr. Suresh Jain, Noble Saji Mathews

## MoUs SIGNED BY IIT TIRUPATI

### IIT Mandi

An MoU was signed between IIT Tirupati and IIT Mandi to establish a long-term strategic partnership for academic and research collaborations. The agreement mainly focuses on research and teaching visits from one campus to the other, so that the two institutes might benefit with the best that both have to offer. The MoU was signed on June 2, 2020.

## Distinguished Lecture Series

**Padma Shri Dr. B. V. R. Mohan Reddy**, Executive Chairman, Cyient, and Chairman, Board of Governors, Indian Institute of Technology Hyderabad, delivered a lecture on "Digital Technologies: Challenges and Opportunities," on February 06, 2020.

## Invited and Special Lectures/Talks held at IIT Tirupati

**Prof. Colin Tyler**, Department of Politics, University of Hull, United Kingdom, delivered a talk on "Democracy and the West," on January 06, 2020.

**Dr. N. Narayanan**, Assistant Professor, IIT Madras, delivered a talk on "An Infinite Flock of Pigeons," on January 21, 2020.

**Prof. Daniel Raveh**, Department of Philosophy, Tel Aviv University, Israel, delivered a talk on "Sri Aurobindo on Life, Death and Deathlessness: A Political Perspective," on February 25, 2020.

**Prof. Seetharama C. Deevi**, Department of Physics, Virginia Commonwealth University and Materials and Manufacturing LLC Midlothian VA, USA, delivered a talk on "Processing and Application of Intermetallic Iron Aluminides," on March 3, 2020.

**Prof. K. R. Srivathsan**, Senior Fellow, Odisha State Open University, Professor (Retd.) IIT Kanpur, delivered a talk on "Perspectives on Quality in Higher Education and Proposing a System of Pedagogy Integrated Technology Enhanced Learning for Enhanced Quality of Higher Education," on March 5, 2020.

## Conferences, Workshops, Symposiums Organized by IITT Faculty

### International Workshop on 'Indian Conceptions of Multiculturalism'

Department of Humanities and Social Sciences organised a Workshop on 'Indian Conceptions of Multiculturalism,' during January 8-9, 2020, at IIT Tirupati. A series of lectures were delivered covering the challenges of multiculturalism in a country like India. The experts arrived from all parts of the world to throw light on the aspects of unity in diversity in the Indian context. Stalwarts like Professor Lord Bhiku Parekh, Professor Akeel Bilgrami, Professor Bindu Puri, Professor Makarand Paranjape, and Professor Faisal Devji delivered engaging lectures to enlighten participants from all over the country.



### Webinar Series in Geotechnical Investigations:

The Geotechnical Engineering group of the Department of Civil and Environmental Engineering initiated a "Webinar Series in Geotechnical Investigations" to disseminate the state-of-the-art and state-of-the-practice in Geotechnical Investigations through a series of online lectures delivered by experts renowned globally. As a part of this series, registration form of approx. 800 participants over 40 countries across worldwide have been received.

## Faculty and Staff News

### New Faculty Entrants

S. No.	Name	Designation and Department	PhD	Previous Employment
1	Dr. A. Raghuramaraju	Professor, Humanities and Social Sciences	Indian Institute of Technology Kanpur	University of Hyderabad
2	Dr. Sasidhar Gumma	Professor, Chemical Engineering	Cleveland State University	IIT Guwahati
3	Dr. Gouriprasanna Roy	Associate Professor, Chemistry	Indian Institute of Science (IISc), Bangalore	Shiv Nadar University

### Sponsored Research Projects and Consultancies

S. No.	Title	Funding Agency	Investigator
1	Anomaly Detection in Multivariate Time Series Data	Toshiba R&D India	Dr. Kalidas Yeturu Dept. of Computer Science and Engineering
2	Survive Covid-19++ - A Game for Improving Awareness of Social Distancing and Health Measures for Covid-19 Pandemic	The Richard Lounsbery Foundation, USA	Dr. Sridhar Chimalakonda Dept. of Computer Science and Engineering
3	Percolation Properties of Next-Generation Wireless Networks	SERB (MATRICS)	Dr. K P Naveen Dept. of Electrical Engineering
4	"Guar-Gum based Novel Biodegradable Abrasive Rheological Medium for Finishing of Drug Eluting Stents using Abrasive Flow Finishing Process"	BIRAC	Dr. M. Ravi Sankar Dept. of Mechanical Engineering
5	Failure Envelopes Generation for UD Composite Plies/Laminates Using Microscale Strain and Damage Analysis	SERB	Dr. Subbareddy Daggumati Dept. of Mechanical Engineering
<b>Consultancies</b>			
1	Development of a Prototype of a Continuous Air Heater with Recycle	Opustayz Hospitality Solutions Pvt Ltd, Bangalore/Trivandrum	Dr. T. Sunil Kumar Dept. of Chemical Engineering
2	Structural Performance comparative study between Steel vs Graphul (polymer based nano material)	AnaMacDesign Pvt Ltd, Gurugram, Haryana, India	Dr. Subbareddy Daggumati Dept. of Mechanical Engineering

### Recent Faculty Publications

#### Journals

##### Chemical Engineering

- A. K. Patan, **S. K. Thamida**, S. Suranani, S. Siliveri, and V. Narayanan, "Experimental Investigation of Start-up Dynamics for Various Heating Effects in Batch Reactive Distillation to Produce Methyl Acetate," *International Journal of Chemical Reactor Engineering*, vo. 18, no. 4, 2020.
- M. Purkait Bhattacharjee, and **S. Gumma**, "Loading and Release of Doxorubicin Hydrochloride from Iron(III)

Trimesate MOF and Zinc Oxide Nanoparticle Composites," *Dalton Trans.*, vol. 49, pp. 8755-8763, 2020.

##### Civil Engineering

- H. S. Liao, Z. K. Curtis, **P. V. Sampath**, and S. G. Li, "Simulation of Flow in a Complex Aquifer System Subjected to Long-Term Well Network Growth." *Groundwater*, vo. 58, no. 2, pp. 301-322, 2020.
- P. Karki, **R. M. Oinam**, and D. R. Sahoo, "Evaluation of Seismic Strengthening Techniques for Non-ductile Soft-story RC Frame," *Advances in Concrete Construction (ACC)*, vo. 9, no. 4, pp. 423-435, 2020.

- P. Vaddy, A. Singh, **P. V. Sampath**, and **K. P. Biligiri**, "Multi-scale In Situ Investigation of Infiltration Parameter in Pervious Concrete Pavements. *Journal of Testing and Evaluation*, vo. 49, no. 5, 2020.

### Computer Science & Engineering

- A. S. M. Venigalla, and **S. Chimalakonda**, "Dynamique–A Technical Intervention to Augment Static Textbook with Dynamic Q&A," *Interactive Learning Environments*, pp. 1-15, 2020.
- **S. Chimalakonda**, and K. V. Nori, "A Family of Software Product Lines in Educational Technologies," *Computing*, pp. 1-28, 2020.

### Electrical Engineering

- Anupama A, Thomas J, J. Sheeba Rani, **Ramakrishna Sai Gorthi**, "Efficient Directionality-driven Dictionary Learning for Compressive Sensing MRI Reconstruction," *Journal of Medical Imaging (JMI)*, vol. 7, no. 1, January 2020.
- G. E. Spoorthi, **Ramakrishna Sai Gorthi** and **S. Gorthi**, "PhaseNet 2.0: Phase Unwrapping of Noisy Data Based on Deep Learning Approach," *IEEE Transactions on Image Processing*, vol. 29, pp. 4862-4872, 2020.
- T. Nakkina, A. Iquebal, **Ramakrishna Sai Gorthi**, and S. Bukkapatnam, "Identification of Microstructures in 3-D-Printed Ti-6Al-4V Using Acoustic Emission Cepstrum," *Smart and Sustainable Manufacturing Systems*, 4, no. 2, pp.163-178, February 2020.
- **K. P. Naveen** and A. Kumar, "Coverage in One-Dimensional Wireless Networks with Infrastructure Nodes and Relay Extensions," *IEEE/ACM Transactions on Networking*, vol. 28, no. 1, pp. 140 - 153, February 2020.

### Mechanical Engineering

- A. Sharma, **S. Daggumati**, A. Gupta, and W. Van Paepegem, "On the Prediction of the Bi-axial Failure Envelope of a UD CFRP Composite Lamina Using Computational Micromechanics: Effect of Microscale Parameters on Macroscale Stress-strain Behavior," *Compos. Struct.*, vol. 251, p. 112605, May 2020.
- Debashis Panda, **E. Anil Kumar**, Sanjay K. Singh, "Introducing Mesoporosity in Zeolite 4A Bodies for Rapid CO<sub>2</sub> Capture," *Journal of CO<sub>2</sub> Utilization*, vol. 40, pp. 101223, 2020.
- J. B. Kedar, K. Sarath Babu, Rakesh Sharma, M. Siva Subrahmanyam, and **E. Anil Kumar**, "Comparison of Ammonia Sorption Properties and Thermodynamic Performance of Adsorption-based Thermal Energy Storage Systems for MnCl<sub>2</sub>, CaCl<sub>2</sub>, and their Composites." *Energy Storage*. 2020.
- J. Das, P. S. Robi, and **M. Ravi Sankar**, "Assessment of

Parameters Windows and Tool Pin Profile on Mechanical Property and Microstructural Morphology of FSWed AA2014 Joints," *SN Applied Sciences*, vol. 2, pp. 123, 2020.

- **S. Daggumati**, A. Sharma, A. Kasera, and N. Upadhyay, "Failure Analysis of Unidirectional Ceramic Matrix Composite Lamina and Cross-Ply Laminate under Fiber Direction Uniaxial Tensile Load: Cohesive Zone Modeling and Brittle Fracture Mechanics Approach," *J. Mater. Eng. Perform.*, 29, pp. 2049-2060, 2020.
- S. Singh, and **M. Ravi Sankar**, "Development of Plymer Abrasive Medium for Nanofinishing of Microholes on Surgical Stainless Steel Using Abrasive Flow Finishing Process," *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, vol. 234, pp. 355–370, 2020.
- S. Singh, **M. Ravi Sankar**, "Development of Rheological Characterization of Abrasive Flow Finishing Medium for Finishing Macro to Micro Features," *Defence Science Journal*, vol. 70, no. 2, pp., 2020.
- Shajiullah Naveed Syed, Vinod Kumar Sharma, and **E. Anil Kumar**, "Thermodynamic and Heat-hydrogen Transfer Analyses of Novel Multistage Hydrogen-Alloy Sorption Heat Pump," *International Journal of Energy Research*, vol. 44, no. 4, pp. 2925-2940, 2020.

### Chemistry

- **P. Gandeepan**, L. H. Finger, T. H. Meyer, and L. Ackermann, "3d Metalla-electrocatalysis for Resource Economical Syntheses." *Chem. Soc. Rev.*, vol. 49, no. 13, pp. 4254-4272, 2020.
- Raka Ahmed, and **Arun K. Manna**, "Molecular-Scale Engineering of the Charge-Transfer Excited States in Non-Covalently Bound Zn-Porphyrin and Carbon Fullerene Based Donor-Acceptor Complex," *Phys. Chem. Chem. Phys.*, vol. 22, no., pp. 14822-14831, 2020.

### Physics

- P. Pramanik, D. C. Joshi, M. Reehuis, A. Hoser, J. U. Hoffmann, **R. S. Manna**, T. Sarkar, and S. Thota, "Neutron Diffraction Evidence for Local Spin Canting, Weak Jahn-Teller Distortion, and Magnetic Compensation in Ti<sub>x</sub>Mn<sub>1-x</sub>Co<sub>2</sub>O<sub>4</sub> spinel," *J. Phys.: Condens. Matter*, vol. 32, pp. 245801, 2020.
- **S. Sahoo**, D. Dey, S. Saha, and M. Kumar, "Haldane and Dimer Phases in a Frustrated Spin Chain: An Exact Groundstate and Associated Topological Phase Transition," *J. Phys.: Condens. Matter*, vol. 32, pp. 335601, 2020.

### Mathematics and Statistics

- Habib Ammari, **Durga Prasad Challa**, Anupam Pal Choudhury, and Mourad Sini, "The Equivalent Media Generated by Bubbles of High Contrasts: Volumetric

Metamaterials and Metasurfaces," *Multiscale Model. Simul.* vol. 18, no. 1, pp. 240–293, 2020.

- **M. Panchatcharam**, and F. Ronan, "GPU Accelerated Radiofrequency and Microwave Ablation for Image-guided Interventions on a Web-framework," *International Journal of Computer Assisted Radiology and Surgery*, 15 (Supplement 1): S54, 2020.

## Humanities and Social Sciences

- **Bharath Kumar**, "Review of Remapping the Postcolonial Canon," *Postcolonial Interventions*, vol. 5, Issue 1, pp 240-48, 2020.
- **C. S. Bahinipati**, "Assessing the Costs of Droughts in Rural India: A Comparison of Economic and Non-Economic Loss and Damage," *Current Science*, vol. 118, no. 11, pp. 1832-1841, 2020.
- Vivek Kumar Yadav, and **Bharath Kumar**, "Review of Indian Political Theory: Laying the Groundwork for Svaraj, Contemporary Voice of Dalit," *SAGE Publications*, vol. 12, no. 1, pp 121–123, 2020.
- **Prabha Shankar Dwivedi**, and Amit Narula "Religious Communities in Simulated Sacred Spaces: A Study of Pilgrimages in Digital Media", *Journal of Content Community & Communication*, vol. 11, pp. 260-67, June 2020.

## Book Chapters

### Computer Science & Engineering

- **Y. Kalidas**, "Chapter 2 - Machine Learning Algorithms, Applications and Practices in Data Science", *Handbook of Statistics*, Elsevier, vol. 43, pp. 81-206, 2020.

### Mechanical Engineering

- **E. Anil Kumar**, Dhananjay Mishra, and Vinod Kumar Sharma, "Estimation of Enthalpy of Formation of Metal Hydrides: Effect of Different Measurement Parameters," *Advances in Energy Research*, Springer, 2020.
- Debashis Panda, **E. Anil Kumar**, and Sanjay K. Singh, "Surface Remodelling of Zeolite 4A Bodies for CO<sub>2</sub> Capture: A Case Study," *Advances in Energy Research*, Springer, 2020.
- Sachin Singh, Vishal gupta, and **M. Ravi Sankar**, "Abrasive Water Jet Machining Process," *Advances in Abrasive Based Machining and Finishing Processes*, Springer, 2020.
- Sachin Singh, Vishal gupta, and **M. Ravi Sankar**, "Magnetic Abrasive Finishing Process" *Advances in Abrasive Based Machining and Finishing Processes*, Springer, 2020.

## Mathematics

- G.P. Kapoor, and **Srijanani Anurag Prasad**, "Orthonormal

Coalescence Hidden-Variable Fractal Interpolation Functions, Fractals and Dynamics in Mathematics, Science, and the Arts: Theory and Applications," *Analysis, Probability and Mathematical Physics on Fractals*, vol. 5 - 2020.

## Humanities and Social Sciences

- **A. Raghuramaraju**, "New Introduction," to *The Prince* by Machiavelli, New Delhi: South Asian Press, 2020.

## Policy Briefs

- **C. S. Bahinipati**, **R. A. Sirohi**, D. Biswal, K. Gouthami, G. Suresh, and M. Singh, "COVID-19: Policy Interventions and Socio-Economic Impact in Andhra Pradesh, India," *Policy Brief No. 1*, Department of Humanities and Social Sciences, Indian Institute of Technology Tirupati, 2020.
- **C.S. Bahinipati**, D. Biswal, and M. Singh, "India's COVID-19 Lockdown Paradox: Reflections from Behavioural Economics," *Policy Brief No. 2*, Department of Humanities and Social Sciences, Indian Institute of Technology Tirupati, 2020.

## Newspaper Articles

- **A. Raghuramaraju**, "Tinted Codes: Colours and Movement in Modern India," *The Telegraph*, January 6, 2020.
- **A. Raghuramaraju**, "Bringing light: Politics and the Interpretation of Texts," *The Telegraph*, February 3, 2020.
- **A. Raghuramaraju**, "Odd Relationship: An Approach through Ethics to Understand Indian Society," *The Telegraph*, March 2, 2020.
- **A. Raghuramaraju**, "Three Options: A Medical Emergency and the Need to Help the Underprivileged," *The Telegraph*, April 6, 2020.
- **A. Raghuramaraju**, "Inner Tension: What is Modern about Renaissance Art?" *The Telegraph*, May 4, 2020.
- **A. Raghuramaraju**, "A Perfect Frame: Picturing Language Pluralism in India," *The Telegraph*, June 8, 2020.
- **A. Raghuramaraju**, "Odisha uses Tirupati IIT mobility analysis to track COVID-19 infection", *New Indian Express*, May 26, 2020.

## Conferences/Proceedings

### Civil Engineering

- K. Pratibadh, S. J. Gaddam, and **P. V. Sampath**, "A Time-Series Modeling Approach for Quantifying the Role of Recharge and Pumping on Groundwater Dynamics," *Indian National Groundwater Conference 2020*, Kozhikode, India, February 2020.
- S. J. Gaddam, and **P. V. Sampath**, "A Data-Intensive Groundwater Modeling Approach for Addressing Water-

Energy-Food Security Nexus," *Roorkee Water Conclave, India*, February 2020.

## Computer Science & Engineering

- A. B. Dhasade, A. S. M. Venigalla, and **S. Chimalakonda**, "Towards Prioritizing GitHub Issues," in *Proceedings of the 13<sup>th</sup> Innovations in Software Engineering Conference on Formerly known as India Software Engineering Conference*, February 2020.
- A. E. Rao, and **S. Chimalakonda**, "An Exploratory Study Towards Understanding Lambda Expressions in Python," in *Proceedings of the Evaluation and Assessment in Software Engineering*, April 2020.
- A. S. M. Venigalla, C. S. Lakkundi, and **S. Chimalakonda**, "PointerViz-Towards Visualizing Pointers for Novice Programmers," in *Proceedings of 53<sup>rd</sup> Hawaii International Conference on System Sciences 2020*, January 2020.
- V. Agrahari, and **S. Chimalakonda**, "Refactor4Green: A Game for Novice Programmers to Learn Code Smells. in *Proceedings of the 42<sup>nd</sup> International Conference on Software Engineering: Companion Proceedings*, June 2020.
- V. Misra, J. S. K. Reddy, and **S. Chimalakonda**, "Is There a Correlation between Code Comments and Issues? An Exploratory Study," in *Proceedings of the 35<sup>th</sup> Annual ACM Symposium on Applied Computing*, March 2020.

## Electrical Engineering

- Bharat Giddwani, Dheeraj Varma, Mohana Murali, and **Rama Krishna Sai S Gorthi**, "Eigen Vectors based Rotation Invariant Multi-Object Deep Detector," *7<sup>th</sup> International Conference on Signal Processing & Integrated Networks*, SPIN, February 2020.
- M. Sushma, and **K. P. Naveen**, "Mobile Data Offloading with Flexible Pricing," in *the 15<sup>th</sup> Workshop on Resource Allocation, Cooperation and Competition in Wireless Networks (RAWNET'20)*, June 2020.

## Humanities and Social Sciences

- **A. Raghuramaraju**, "Pluralism and Language Federalism in Indian Society," *International Workshop on Indian Conceptions of Multiculturalism*, Indian Institute of Technology Tirupati, January 2020.
- Atul Kumar Singh, and **Prabha Shankar Dwivedi**, "Language Question in Mothering of a Territory: The Concurrences and Conflicts in Maternal Representations of Indian Territory/territories", *International Seminar on Reconfiguring Nationalism: Protest and Acquiescence*, Bodoland University, Assam, February 6-8, 2020.
- **C. S. Bahinipati**, and P. K. Viswanathan, "Climate Services, Agriculture and Rural India: A review of Empirical Evidence," *6<sup>th</sup> International Conference on Climate Services*

(ICCS6), Indian Institute of Tropical Meteorology, Pune, India, February 2020.

- **C. S. Bahinipati**, and P. K. Viswanathan, "Incentivizing Resource Efficient Technologies in India: Evidence from Diffusion of Micro-Irrigation in Dark-Zone Regions of Gujarat," *International seminar on Micro-irrigation in India: Economics, Impact and Potential*, Alagappa University, Karaikudi, India, January 2020.
- **C. S. Bahinipati**, and U. Patnaik, "Human Development, Inequality and Flood Damages: Empirical evidence from the Indian states," *the 2020 HDCA Conference on New Horizons: Sustainability & Justice*, Auckland, New Zealand, July 2020.
- K. Ghosh and **V. Vamshi Krishna Reddy**, "Redefining the Kitchen-Space: Negotiating Gender and Identity," *3<sup>rd</sup> International Conference on Future of Women*, Bangalore, February 2020
- N. Nakra, and **V. Kashyap**, "Developing Sustainable Human Resources: A Review and Research Agenda," Paper accepted for presentation at *European HRD Conference*, Budapest, Hungary, June 2020.
- **Prabha Shankar Dwivedi**, Keynote address on "Ecological Concerns of Theological Texts" at a *National Conference on Contemporary Perspectives and Development in Humanities and Management*, Dr. NGP Arts and Science College, Coimbatore, March 2020.
- **Prabha Shankar Dwivedi**, "Indian Theories of Language", *Online One-Week Faculty Development Programme on Indian Literature and Languages: Paradigms and Praxis*, SRM University, Sikkim, May 2020.
- **V. Kashyap**, and R. Arora, "Decent Work and Work-Family Enrichment: Role of Meaning at Work and Work Engagement," Paper accepted for presentation at *European HRD Conference*, Budapest, Hungary, June 2020.
- **V. Kashyap**, N. Nakra, and R. Arora, "Linking Dimensions of 'Decent Work' and Work Engagement," *Architecting Indian Management Scholarship in the Era of Disruption: 6<sup>th</sup> Biennial Conference of Indian Academy of Management*, Ahmedabad, Indian Institute of Management, Tiruchirappalli, January 2020.
- **V. Kashyap**, S. Jain, and S. Kshatriya, "Role of Indian Business Organizations in Achieving Sustainable Development Goals (SDGs): A study on adoption of Sustainable HRM Policies and Practices," paper accepted for presentation at *3<sup>rd</sup> Annual conference of Indian Public Policy Network*, ISB Mohali, March 2020.

## Awards/Achievements

- **Dr. Subrahmanyam Gorthi** from the Department of Electrical Engineering was chosen as the person of the week of National Digital Library of India (NDLI) in June 2020.

## Events & Activities

### 71<sup>st</sup> Republic Day Celebrations on the Permanent Campus

IIT Tirupati celebrated the 71<sup>st</sup> Republic Day on January 26, 2020 on its permanent campus. The celebrations began with unfurling of the national flag by the Director Prof. K. N. Satyanarayana, followed by the national anthem. The Director addressed the gathering of the faculty, staff and students. Students organised diverse cultural events relating to the national unity and love for the country.



### Civil Engineering Society

Civil Engineering Society (CES) was established at IIT Tirupati with a strength of 177 (students, faculty and staff) of the Dept. of Civil and Environmental Engineering. Prof. K. N. Satyanarayana, Director IITT inaugurated the Society on March 13, 2020 in the gracious presence of Shri Y. Hari Krishna, Managing Director of Keller India Pvt. Ltd. The primary goal of CES is to encourage the students in the civil and infrastructure related activities and motivate them to come up with innovative and sustainable solutions to the contemporary challenges of the profession. On this occasion, Keller India Pvt. Ltd. presented all the students, faculty and staff of the Dept. and Engineering Unit staff with helmets to mark the importance of safety practices in civil engineering work.

### Swachchh Bharat Pakhwada

As part of the Swachha Bharat Campaign, the Swachchh Bharat Pakhwada was observed from January 16-31, 2020. For this fortnight long celebration, there were a number of pro-environment activities. Faculty and students took the Swachchhata Pledge followed by campus cleaning, plantation drives and an essay writing competition.



### MEDHA: Women's Forum of IIT Tirupati

IIT Tirupati's women forum, Medha, was inaugurated on the occasion of women's day on March 12, 2020, by Prof. Duvvuru Jamuna, Vice Chancellor, Sri Padmavati Mahila Viswavidyalayam was the chief guest to honour this occasion. Dr. Vasudha Katju, Faculty Associate, KREA University gave an enlightening lecture as the guest speaker, and the event was presided over by the director Prof. K. N. Satyanarayana. Following up on the lectures, there was a discussion forum where students, research scholars participated actively.



### Fit India: Fitness Club

FIT INDIA movement was launched by the Hon'ble Prime Minister on August 29, 2019. IIT Tirupati followed up in the same lines and inaugurated its own fitness club on January 22, 2020 on the Transit Campus. The idea of a fitness club is to unify all kinds of sports, physical activities like yoga, dance, walking, jogging into a single organised body. It promotes a healthy lifestyle coupled with physical activities among individuals and of the organization at large. Helmed by Dr.

Ajay Kumar from the Mechanical Engineering Department, the Fitness Club has been spreading awareness ever since. On February 22, 2020, they organised a seminar on "Importance of Physical Activity, Yoga & Meditation and Healthy Food" and an awareness drive on the banning of junk food on campus. In the month of July, the Fitness Club had been proactively registering candidates for Yoga sessions over a virtual platform.

## International Yoga Day Celebrations

Owing to the pandemic crisis, this year, IIT Tirupati celebrated International Day of Yoga on June 21, 2020 over a Zoom meeting. The Hon'ble Director, Deans, Faculty and students participated remotely to mark the hour-long session of asanas and breathing movements.

## Tirutsava - 2020

The third edition of the annual techno-cultural festival began with full splendour from January 31- February 02, 2020. In its third edition, Tirutsava witnessed a greater participation and a bigger audience. Committees were formed and students volunteered in big numbers. An array of events was organised ranging from coding challenges, box cricket to cooking, dancing, treasure hunt, popular culture quiz to name a few. A good number of workshops, seminars were organised for students from all over Tirupati and its neighbouring towns.

The campus experienced widespread interactions among students of regional colleges. The weekend saw an enthralling performance by Revanth, an Indian Idol participant. Tirutsava ended on a high note with students taking away cash prizes, vouchers, paving way for more such eventful programmes.

## Club Activities: Chaturanga

Following the imposition of the nation-wide lockdown, the mode of functioning of institutions changed to online. Despite the disabilities and lack of visible interactions, the Quiz club headed by Sabari Shekhar organised weekly quarantine quiz sessions from April 2020 via Kahoot, and then Google Meet. Chaturanga, the Chess club conducted an online chess competition on July 4, 2020 via li.chess.org.

## Sarathi

The Guidance and Counselling Unit, Sarathi, invited faculty for a seminar on "red flag detection" conducted by eminent psychologist, Dr. Jini Gopinath. The idea was to enable a healthy mental health environment in the campus. The



complete closure of educational institutions threw normalcy of routine, Sarathi in association with a start-up YourDOST continues to send mailers, organise webinars and reach out to students in their respective homes via audio/video calls.

Editor

**Dr. P. S. Dwivedi**, HSS

Contact

**Indian Institute of Technology Tirupati**

Renigunta Road, Settipalli Post, Tirupati – 517506, A.P., India.

Ph.: (+91) 0877 2500334 Fax: (+91) 0877 2500370 Email: newsletter@iittp.ac.in