# A Biannual Newsletter of IIT Tirupati Samuel Newsletter of IIT Tirupati



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The first convocation of IIT Tirupati was held on August 13, 2019. The day also marked the inauguration of the Phase-I, Stage-1A of the Permanent Campus. The occasion was graced by the presence of the Hon'ble HRD minister, Dr. Ramesh Pokhriyal 'Nishank' as the chief guest, Dr. Audimulapu Suresh (Hon'ble Minister for Education, Govt. of Andhra Pradesh) as the guest of honour, and Shri R. Subrahmanyam (Secretary, Higher Education, MHRD and Chairman of the Board of Governors, IIT Tirupati). Distinguished faculty from other academic institutions, Institute faculty and staff, graduands and their proud parents were among the audience.

Prof. K. N. Satyanarayana, Director, IIT Tirupati, welcomed the guests, and presented the report of the progress made by the Institute since its inception. The chief guest, Dr. Ramesh Pokhriyal 'Nishank', delivered an inspiring convocation address, motivating the graduands to attend greater heights by using their technical skills to serve the nation and humanity at large. A total of 103 B. Tech students and one M. S. scholar were awarded degrees in the convocation. The chief guest also awarded medals to the meritorious students.



Akash B. Dhasade – President's Medal
Narender – Institute Medal (CE)
Akash B. Dhasade – Institute Medal (CSE)
Gurugubelli Sravanthi – Institute Medal (EE)
Ajay Vaishnav – Institute Medal (ME)
Nikhil Sharma – Governor's Medal







#### **MoU with NVIDIA Labs**

IIT Tirupati and NVIDIA Labs signed an MoU on July 17, 2019, to initiate collaborations between the two organizations in the areas of Artificial Intelligence, Machine Learning, Computer Vision, and Accelerator development. The MoU further aims at jointly developing the state-of-the-art computing facilities at IIT Tirupati.

#### **Lectures held at IIT Tirupati**

#### **Distinguished Lectures**

 Prof. P. Balaram, Former Director, Indian Institute of Science, Bangalore, delivered a lecture on "Is the Public Understanding of Science Important?" on November 18, 2019.



 Prof. K. E. Seetha Ram, Visiting Professor, University of Tokyo, Japan, delivered a lecture on "Engineering Education, Infrastructure and Economy: Reflections and Lessons from Asian Countries for India's Journey to become a \$5 Trillion Economy" on October 16, 2019.



#### **Invited Lectures**

**Ms. Aleksandra Stevanovic**, Researcher, University of Belgrade, Serbia, delivered a lecture on "From Analog to Digital: Artificial Intelligence and the Logos of Dictionary of Technology", on November 25, 2019.

**Richard N. Zare,** Department of Chemistry, Stanford University, California, delivered a lecture on "Water: So Common, So Mysterious", on November 20, 2019.

**Dr. M. Y. S. Prasad**, Vice-Chancellor, VFSTR, Former Distinguished Scientist (APEX) ISRO, Former Director, Satish Dhawan Space Centre, Sriharikota, delivered a lecture on "Reaching out to MARS: Details of Global Mars Missions", on November 6, 2019.



**Prof. B. Yegnanarayana**, Adjunct Professor, IIT Tirupati and INSA Senior Scientist, IIIT Hyderabad, delivered a lecture on "Human vs Machine Intelligence: The Architectural Mismatch", on October 9, 2019.

**Prof. Monika Kirloskar-Steinbach**, University of Konstanz, Germany, delivered a lecture on "Resisting Hegemonic Theory Production in Contemporary Indian Philosophy" on August 21, 2019.

Ambassador Pradeep Kumar Kapur, Fellow at the Sigur Center for Asian Studies, The George Washington University, delivered a lecture on "Development Diplomacy: Global and Local Perspectives", on July 19, 2019.



# **Conferences and Workshops Organized by IIT Tirupati**

- Dept. of Mathematics & Statistics organized an Advanced Training School on "Numerical PDEs & Inverse Problems" during December 9-22, 2019.
- Dr. V. Vamshi Krishna Reddy and Dr. P. S. Dwivedi, Dept. of Humanities and Social Sciences, IIT Tirupati, in collaboration with the Office of The US Consulate General, Hyderabad, organized a three-day workshop on "Academic Writing Workshop" during December 10-12, 2019. Ms. Carol Ruppel, ELT expert, USA, conducted the workshop for the participants.
- Dr. Shihabudheen M. Maliyekkal, Dept. of Civil Engineering, IIT Tirupati, organized a one-day seminar on "Thermo Fisher Scientific Analytical Technologies", on November 4, 2019.
- IIT Tirupati and Confederation of Indian Industry (CII) in association with Andhra Pradesh Food Processing Society, Department of Industries and Commerce, Government of Andhra Pradesh organized the 5th Edition of FOODBIZ INDIA 2019 with a theme focusing on "Rejuvenating Innovation and Challenges in Food Processing and Allied Sectors", during October 16-17, 2019.





 Dept. of Computer Science & Engineering, IIT Tirupati, organized a Summer School on "Artificial Intelligence and Machine Learning", during July 22-26, 2019.

## **Sponsored Research Projects**

S. No.	Title	Funding Agency	Investigator
1	Novel 3D Printed Ceramic Composite based Separation Process for Industrial Wastewater Treatment	DST	Dr. R. Harikrishnan Dept. of Chemical Engineering
2	Accelerated Carbonation of Municipal Solid Waste and Industrial Byproducts for CO2 Sequestration - Scope for Climate Change Mitigation	DST (WOS-A)	Dr. R. Harikrishnan Dept. of Chemical Engineering
3	A Rayleigh Wave based Technique for Near-Surface Damage Detection in Concrete Structures through Application of Non- Contact based Sensing	CSIR	Dr. Abhijit Ganguli Dept. of Civil and Environmental Engineering
4	Developing a Design Basis for Cold-formed Steel Wall Panels under Seismic Loading	SERB	Dr. M. Nithyadharan Dept. of Civil and Environmental Engineering
5	Interactive Desktop Tool for Nonstationary Intensity-Duration- Frequency Curves under Climate Change	SERB	Dr. Roshan Karan Srivastav Dept. of Civil and Environmental Engineering
6	Production of a Nanocomposite Sealant from Aquatic derived Waste Materials.	SERB	Dr. Shihabudheen M. Maliyekkal Dept. of Civil and Environmental Engineering
7	Intelligent Test and Reliability Architecture for Extreme Low-power IoT Sensor Nodes	SERB	Dr. Jaynarayan Thakurdas Tudu Dept. of Computer Science and Engineering
8	Deep Learning Algorithms for Molecular Structural Data Analysis with Applications in Drug Discovery and Bioinformatics	SERB	Dr. Kalidas Yeturu Dept. of Computer Science and Engineering
9	A Scalable Secure Architecture Model for Privacy and Performance in IoT	SERB	Dr Venkataramana Badarla Dept. of Computer Science and Engineering
10	Coexistence of LTE-Unlicensed and WiFi: Theory and Practice	SERB	Dr. K. P. Naveen Dept. of Electrical Engineering

S. No.	Title	Funding Agency	Investigator
11	A High Accuracy Digitizer for Calibration of Instrument Transformers		Dr. Prashanth Vooka Dept. of Electrical Engineering
12	Automated Detection and Classification of Traumatic Brain Injuries in Head CT Images		Dr. Subrahmanyam Gorthi Dept. of Electrical Engineering
13	A Non-newtonian Fluid Model for the Dissipation Rate of Interfacial Waves		Dr. Girish Kumar Rajan Dept. of Mechanical Engineering
14	Design and development of Automated Flexible Abrasive Flow Finishing (AF-AFF) Process for finishing of Micro to Macro Complex Features		Dr. Mamilla Ravi Sankar Dept. of Mechanical Engineering
15	Nanofinishing of Complex 3D Printed Metallic and Ceramic Components using Polymer Rheological Abrasive Medium		Dr. Mamilla Ravi Sankar Dept. of Mechanical Engineering
16	Physics-based Digital Twin for Automotive Brakes	SERB	Dr. Sriram Sundar Dept. of Mechanical Engineering
17	A Novel Scheme to Cool the Translational as well as Internal Degrees of Freedom of Any Molecular Ion Beam		Dr. Reetesh Kumar Gangwar Dept. of Physics

## **Recent Faculty Publications**

#### **Journals**

#### **Civil and Environmental Engineering**

- A. Seitllari, Y. S. Kumbargeri, K. P. Biligiri, and Ilker Boz, "A Soft Computing Approach to Predict and Evaluate Asphalt Mixture Aging Characteristics using Asphaltene as a Performance Indicator," *Materials and Structures, Springer*, vol. 52, no. 100, October 2019.
- A. Singh, G. S. Jagadeesh, P. V. Sampath, and K. P. Biligiri, "Rational Approach for Characterizing in Situ Infiltration Parameters of Two-Layered Pervious Concrete Pavement Systems." Journal of Materials in Civil Engineering, vol. 31, no. 11, pp. 04019258, August 2019.
- **B. Balakrishnan**, I. Geevar, K. V. Jithin, and D. Menon, "Generation of P-M Interaction Design Charts for RC Shear Walls," *Indian Concrete Journal*, vol. 93, no. 7, pp. 46-54, July 2019.
- G. Saha, and K. P. Biligiri, "Investigation of Crack Initiation Behavior of Asphalt Mixtures: Fatigue through Dynamic Semicircular Bending Test," *Journal of Testing and Evaluation, American Society for Testing and Materials International*, vol. 47, no. 5, pp. 3322-3335, September 2019.
- P. Kumar, A. Ganguli, and G. S. Benipal, "Comparative Assessment of the Contending Force and Placement Methods for Weightless Sagging Cables," Asian Journal of Civil Engineering, vol. 20, no. 7, July 2019
- V. Araya, S. M. Maliyekkal, and L. Philip, "Water Pollution and Treatment Technologies - Indian Perspective," Water Futures of India: Status of Science and Technology, Indian National Science Academy, pp. 215-252, November 2019.
- V. Venudharan, and K. P. Biligiri, "A Novel Design Toolkit to Assess Asphalt-Rubber Gap-Graded Mixture Performance: Target Properties and Parametric Relationships," Construction and Building Materials, Elsevier, vol. 219, pp. 69-80, September 2019.
- V. Venudharan, and K. P. Biligiri, "Investigation of Cracking Performance of Asphalt-Rubber Gap-Graded Mixtures:

Statistical Overview on Materials' Interface," *Journal of Testing and Evaluation, American Society for Testing and Materials International*, vol. 47, No. 5, pp. 3336-3354, September 2019.

#### **Computer Science and Engineering**

S. P. V. Gollapudi, V. Choppella, L. M. Sanagavarapu, S. Chimalakonda, and Y. R. Reddy, "Promoting Better Financial Inclusion through Web Page Transformation—A Systematic Literature Review," *Journal of Banking and Financial Technology*, vol. 3, pp. 131-147, November 2019.

#### **Mechanical Engineering**

- D. K. Panchariya, **E. A. Kumar**, and S. K. Singh, "Inducing In Situ Hydrothermal Carbonization of Glucose to Synthesize Carbon–MIL-101 Hybrid Composites for Improved Hydrogen Uptake," *Energy & Fuels*, vol. 33, no. 10, pp. 10123-10132, September 2019.
- D. K. Panchariya, E. A. Kumar, and S. K. Singh, "Lithium-Doped Silica-Rich MIL-101 (Cr) for Enhanced Hydrogen Uptake," Chemistry, An Asian journal, vol. 14, no. 20, pp. 3728-3735, October 2019.

#### **Mathematics and Statistics**

- H. Ammari, **D. P. Challa**, A. P. Choudhury and M. Sini, "The Point-Interaction Approximation for the Fields Generated by Contrasted Bubbles at Arbitrary Fixed Frequencies", J. Differential Equations vol. 267, no. 4, pp. 2104–2191, August 2019.
- M. Moche, H. Busse, J. J. Futterer, Camila A. Hinestrosa, Daniel Seider, Philipp Brandmaier, Marina Kolesnik, Sjoerd Jenniskens, Roberto Blanco Sequeiros, Gaber Komar, Mika Pollari, Martin Eibisberger, Horst Rupert Portugaller, Philip Voglreiter, Ronan Flanagan, and P. Mariappan, "Martin Reinhardt, Clinical Evaluation of in Silico Planning and Real-Time Simulation of Hepatic Radiofrequency Ablation (Clinic IMPPACT Trial)", European Radiology, vol. 30, pp. 934-942, August 2019.
- S. A. Prasad, "Reproducing Kernel Hilbert Space and Coalescence Hidden-variable Fractal Interpolation Functions", *Demonstratio Mathematica*, vol. 52, pp. 467-474, September 2019.

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#### **Chemistry**

 Syed Yunus Ali, Kambham Devendra Reddy, Arun K. Manna, "Metal Dimethylglyoximato [M(DMG)2; M = Ni2+ Cu2+] Complexes: A Comparative Theoretical Study," J. Phys. Chem. A, vol. 123, no. 42, pp. 9166-9174, October 2019.

#### **Physics**

- A. Yadav, P. C. Deshmukh, K. Roberts, N. M. Jisrawi, and S. R. Valluri, "An Analytic Study of the Wiedemann-Franz Law and the Thermoelectric Figure of Merit," *Journal of Physics Communications*, vol.3, no.10, October 2019.
- V. U. Kumar, G. Chitikela, N. Balasa, and P. C. Deshmukh, "Revisiting Table-Top Demonstration of Relativistic Time-Dilation and Length-Contraction," *Bulletin of the Indian Association of Physics Teachers*, vol. 11, no. 6, pp. 172-179, 2019.

#### **Humanities and Social Sciences**

- C. S. Bahinipati and P. K. Viswanathan, "Can Micro-Irrigation Technologies Resolve India's Groundwater Crisis? Reflections from Dark-Regions in Gujarat," *International Journal of the Commons*, vol. 13, no. 2, pp. 848-858, October 2019.
- C. S. Bahinipati and P. K. Viswanathan, "Incentivizing Resource Efficient Technologies in India: Evidence from Diffusion of Micro-Irrigation in the Dark Zone Regions of Gujarat," *Land Use Policy*, vol. 86, pp. 253-260, July 2019.
- Pankaj Kumar Verma, Prabha Shankar Dwivedi, and V. Vamshi K. Reddy, "The Bhagavadgītā and Kādambari: Disinterring the Philosophico-cultural Foundations of Longing and Rebirth", Literaria, New Delhi: Bahri Publications, Vol. 9, No. 1-2, pp. 95-103, September 2019.
- V. Kashyap and R. Chaudhary, "Linking Employer Brand Image and Work Engagement: Modelling Organizational Identification and Trust in Organization as Mediators," South Asian Journal of Human Resources Management. Vol. 6, no. 2, pp. 177-201, December 2019.

#### **Books**

- P. C. Deshmukh, Ed., Quantum Collisions and Confinement of Atomic and Molecular Species, and Photons, Springer, 2019.
- P. C. Deshmukh, Foundations of Classical Mechanics, Cambridge University Press, 2019.

# **Conferences/Proceedings**

#### **Chemical Engineering**

• J. Valluru, M. Nabil and B. Huang, "Robust Extended Kalman Filter with Inequality Constraints," in 69th Canadian Chemical Engineering Conference, Halifax, Canada, October 20-23, 2019.

#### **Civil and Environmental Engineering**

 A. Singh, M. Nithyadharan, P. V. Sampath, and K. P. Biligiri, "Structural Design of Pervious Concrete Pavements: A Computational Mechanics Approach," in 5<sup>th</sup> Conference of the Transportation Research Group of India (CTRG-2019), Bhopal, India, December 18-21, 2019.

- A. Singh, P. V. Sampath, and K. P. Biligiri, "Smart City Initiative: Pervious Concrete Shoulders & Berms," *International Conference on Smart Cities* (2019 ICSC), Seoul, South Korea, July 17-19, 2019.
- D. Ghosh, S. Beniwal, A. Ganguli, A. Mukherjee and S. Bishnoi, "Cross-Correlation Based Imaging of Defects in Plate using Ultrasonic Lamb Waves," NDE 2018 Conference & Exhibition of the Indian Society for NDT (ISNT), Navi Mumbai, India, December 19-21, 2018.
- M. S., Pandikkadavath, and R. M. Oinam, "Effect of Response Reduction Factor R on Seismic Drift Response of Buckling Restrained Braced Frames," Proceedings of the Innovative Trends in Civil Engineering for Sustainable Development (ITCSD), Warangal, India, September 13-15, 2019.
- P. Raj, G. Asaithambi, and A. U. R. Shankar, "Assessment of Impact of Roadside Bus-stops on Capacity of Urban Divided Roads using Microscopic Simulation Model," in 5<sup>th</sup> Conference of Transportation Research Group of India (CTRG-2019), Bhopal, India, December 18-21, 2019.
- P. Vaddy, A. Singh, P. V. Sampath, and K. P. Biligiri, "Harnessing Benefits of Pervious Concrete Pavements: A novel UHI Mitigation Strategy," in 5<sup>th</sup> International Conference on Countermeasures to Urban Heat Islands (IC2UHI), Hyderabad, India, December 2-4, 2019.
- P. Vaddy, A. Singh, P. V. Sampath, and K. P. Biligiri, "Multi-scale In-situ Investigations for Characterization of Infiltration Parameter in Pervious Concrete," *International Conference on Resource Sustainability - Cities (icRS Cities 2019*), Adelaide, Australia, July 1-3, 2019.
- S. J. Gaddam and P. V. Sampath, "Groundwater Assessment at Local Scales: BIG DATA and Policy Implications," Water Future Conference, Bengaluru, India, September 24 – 27, 2019.
- S. K. Sahdeo, A. K. Chandrappa, and K. P. Biligiri, "Effects of Compaction Types and Efforts on Properties of Pervious Concrete," in 5<sup>th</sup> Conference of the Transportation Research Group of India (CTRG-2019), Bhopal, India, December 18-21, 2019.
- U. Kannan and S. M. Maliyekkal, "An Affordable and Ecofriendly Methodology towards the Clean Water," *Water Future Conference, Indian Institute of Science,* Bengaluru, India. September 24-27, 2019.
- U. Kannan and S. M. Maliyekkal, "Fabrication of Reusable Film Forming Paint: A sustainable Solution for Point of Use Disinfection of Water," Proceedings of 14<sup>th</sup> International Conference on Materials Chemistry, Royal Society of Chemistry, Birmingham, United Kingdom, July 8-11, 2019.
- Y. P., Venkatesh and M. Nithyadharan, "Cold Formed Steel Buildings: An Affordable Housing Solution for Rural India," COSVARD 2019: International Conference, Guwahati, India, December 2–4, 2019.

#### **Computer Science and Engineering**

- A. S. M. Venigalla and S. Chimalakonda, "Towards Enhancing User Experience through a Web-Based Augmented Reality Museum." in 2019 IEEE 19<sup>th</sup> International Conference on Advanced Learning Technologies (ICALT), Brazil, July 15-18, 2019.
- A. S. M. Venigalla, C. S. Lakkundi, and S. Chimalakonda, "SOTagger - Towards Classifying Stack Overflow Posts through Contextual Tagging (S)," The 31<sup>st</sup> International Conference on Software Engineering and Knowledge Engineering, SEKE 2019, Lisbon, Portugal, July 10-12, 2019.

A. S. M. Venigalla, C. S. Lakkundi, V. Agrahari, and S. Chimalakonda, "StackDoc-A Stack Overflow Plug-in for Novice Programmers that Integrates Q&A with API Examples," in 2019 IEEE 19<sup>th</sup> International Conference on Advanced Learning Technologies (ICALT), Brazil, July 15-18, 2019.

#### **Electrical Engineering**

- P. Vyavahare, D. Manjunath, and J. Nair, "Sponsored Data with ISP Competition," in *International Teletraffic Congress ITC 31*, Budapest, Hungary, August 27-29, 2019.
- P. Vyavahare, L. Su, and N. Vaidya, "Distributed Learning over Time-Varying Graphs with Adversarial Agents," in *International* Conference on Information Fusion held, Ottawa, Canada on July 2-5, 2019.

#### **Mechanical Engineering**

- K. G. Reddy and G. K. Rajan, "An Analysis of the Surface Contamination of the Earth's Oceans," in *International Symposium* on *Advances in Coastal Research with Special reference to Indo Pacific* (AdCoRe IP - 2019), the National Centre for Coastal Research (NCCR) at NIOT Campus, Chennai, India, Dec 17-19, 2019.
- Madan Mohan A., R. Pos, A. Megaritis and L. C. Ganippa, "Effect of Spray Bulging on Combustion of High-Pressure Diesel Sprays," in 29th European Conference on Liquid Atomization and Spray Systems, ILASS-Europe 2019, Paris, France, September 1-4, 2019.
- Nikhil Kumar E and Madan Mohan A., "Dynamics of Liquid Sheet Breakup Due to Perforations in Impingement Jet Atomization," in 29<sup>th</sup> European Conference on Liquid Atomization and Spray Systems, ILASS-Europe 2019, Paris, France, September 1-4, 2019.

#### **Chemistry**

- A. K. Manna, "Excitons in Molecular Solids," in *Young Investigators Meet on "Quantum Condensed Matter Theory"*, S. N. Bose National Centre for Basic Sciences, Kolkata, India, December 11-13, 2019.
- R. Ahmed and A. K. Manna, "Optical Absorption and Spin-State Energetics using Optically Tuned Range-Separated Hybrid Functional," in *International Conference on "Spins in Molecular Systems: Experiments, Theory and Applications*, IISc Bangalore, India, December 2-4, 2019.
- R. Ahmed, S. Nandi and A. K. Manna, "Vacancy Defects in 2D SiC and ZnO Nanostructures," International Conference on "Spins in Molecular Systems: Experiments, Theory and Applications," IISC Bangalore, India, December 2-4, 2019.
- R. Biswas, "In Silico Spectroscopy and Structure-Spectrum Correlations of Aqueous Systems," in Conference on "Recent Advances in Dynamics at the Interface of Chemistry and Biology (DICB – 2019)", Indian Institute of Science, Bengaluru, February 18-20, 2019.

#### **Physics**

- B. Koteswara Rao, "Bose-Einstein Condensation of triplons in an Antiferro Magnet: A system close to QCP," in the 11<sup>th</sup> International Conference on Magnetic and Superconducting Materials (MSM19), Seoul National University, Seoul, South-Korea, August 17-25, 2019.
- K. Boya, D. Patil, K. H. Kim, and B. Koteswara Rao, "Frustrated

Magnetism in S = 5/2 zig-Zag Chain System Bi3FeMo2O12" in the 11<sup>th</sup> APCTP-IACS-IITB Joint Conference on Emergent Phenomena in Novel Oxide Materials and Low Dimensional Systems, November 28-30, 2019.

#### **Humanities and Social Sciences**

- C. S. Bahinipati and P. K. Viswanathan, "Can Resource Efficient Technologies Resolve India's Ground Water Crisis?" in Waterfuture Conference 2019 on 'Towards a Sustainable Water Future', Indian Institute of Science (IISc), Bengaluru, India, September 24-27, 2019.
- C. S. Bahinipati, "Challenges in Estimating Loss and Damages from Climatic Extremes Across Indian Cities," in *International Workshop on 'Building Disaster and Climate Resilience in Cities'*, Kuala Lumpur, Malaysia, October 15-16, 2019.
- C. S. Bahinipati, "Impact of Floods across the Indian States: The Role of Human Development, Inequality and Forest Cover "INSEE-CESS," in *International Conference on 'Climate Change and Disaster: Challenges, Opportunities and Responses,* Centre for Economics and Social Studies, Hyderabad, India, November 6-8, 2019.
- C. S. Bahinipati, "Integrated Climate Risk and Vulnerability Assessment for Himachal Pradesh and Tamil Nadu: An Application of Climate Risk Management Framework," in International Symposium on 'Disaster Resilience and Green Growth for Sustainable Development', National Institute of Disaster Management, New Delhi, India, September 26-27, 2019.
- C. S. Bahinipati, V. Kumar and P. K. Viswanathan, "A Systematic Review of Farmers' Adaptive Behaviour to Climate Change in India," in *National Conference on 'Climate Change Adaptation in Agriculture for Sustainable Livelihoods'*, National Institute of Rural Development and Panchayati Raj, Hyderabad, India, November 22-23, 2019.
- C. S. Bahinipati, V. Kumar, and P. K. Viswanathan, "Systematic Review of Adoption of Climate Smart Agricultural Practices in India," in 2<sup>nd</sup> OSTROM Retreat on "Redefining Diversity and Dynamism of Natural Resource Management in Asia", Asian Institute of Technology, Bangkok, Thailand, July 11-15, 2019.
- K. Saranya and P. K. Prasanna, "Portfolio Risk Optimization: Modeling Stochastic Volatility & Dynamic Correlations," in Research Symposium on Finance and Economics (RSFE 2019), Krea University, India, December 12-13, 2019.
- Prabha Shankar Dwivedi, "Language, Nation, and Religion: Towards Understanding the Traditional Roots of Contemporary India," at ICSSR sponsored National Conference on 'Nationalism, Identity and Sanskrit: Text, Context and the Contemporary Agenda', DHSG Central University, Sagar, Madhya Pradesh, October 22-24, 2019.
- U. Gundala, V. V. K. Reddy and P. S. Dwivedi, "Competence and Confidence through Technology Enhanced Language Learning-The Impact of Technology Among Rural and Semi-Urban Undergraduates of Engineering in India: A Study," 2019 IEEE 19<sup>th</sup> International Conference on Advanced Learning Technologies (ICALT), pp. 261-262, Maceió, Brazil, July 15-18, 2019.
- V. Kashyap and N. Verma, "HRM Practices and Innovative Work Behavior: Role of Work Engagement and Organizational Norms," in 79<sup>th</sup> Annual meeting of the Academy of Management (AOM), Boston, Massachusetts, USA, August 9-13, 2019.

## **New Faculty Entrants**

S. No.	Name	Department	Ph.D From	Previous Employment
1	Dr. Viju Nair	Electrical Engineering	IISc Bangalore	PDF from NC State University, USA
2	Prof. C. P. Rao	Chemistry	IISc Bangalore	Professor, IIT Bombay
3	Dr. T. Sunil Kumar	Chemistry	University of Notre Dame, USA	Associate Professor at NIT Warangal
4	Dr. Anup Basak	Mechanical Engineering	IIT Kanpur	Postdoctoral research associate at Iowa State University
5	Dr. Raghavendra Kanakagiri	Computer Science and Engineering	IIT Madras	Postdoctoral Research Associate at University of Illinois at Urbana – Champaign
6	Dr. M. Nabil	Chemical Engineering	IIT Madras	Post-Doctoral Fellow at University of Alberta
7	Dr. Ajin George Joseph	Computer Science and Engineering	IISc Bangalore	PDF from University of Alberta
8	Dr. Gurugubelli Vijay Kumar	Electrical Engineering	IIT Madras	Maxim India Integrated Circuit Design Pvt. Ltd.
9	Dr. Ajay Kumar	Mechanical Engineering	IISc Bangalore	Postdoctoral Research Associate at University of Wisconsin-Milwaukee USA
10	Dr. Krishna Kishore G. V.	Mathematics	Indiana Univerity, USA	Assistant Professor, IIT Dharwad
11	Dr. Subbareddy Daggumati	Mechanical Engineering	Ghent University, Belgium	Assistant Professor, IIT Indore
12	Dr. Gandeepan P.	Chemistry	NTHU, Taiwan	PDF from School of Chemistry, University of Bristol, United Kingdom
13	Dr. Bhuktare Swapnil Sopanrao	Electrical Engineering	IIT Bombay	Assistant Professor, NIT Allahabad

## **New Staff Entrants**

S. No.	Name of the Staff	Designation
1.	Rapolu Mallikarjun	JTS, Chemical Engineering
2.	Tandelu Balaram	JT, Chemical Engineering
3.	Kollu Homprakash	JTS, Electrical Engineering

S. No.	Name of the Staff	Designation
4.	K. N. Dwaraka Natha	JTS, Electrical Engineering
5.	Sreekar Kumar S.	Junior Library Technician

#### **Events and Activities**

#### **Academic Orientation Programme**

The Institute conducted its 5<sup>th</sup> Orientation Programme on July 25, 2019, to induct the 2019-2023 batch of B. Tech students. The students and their parents were briefed about the academic programme and the facilities available at IIT Tirupati. It was followed by an interactive session for the parents with the Director and Deans of the Institute.



#### **7K FUN RUN**

Teachers, students and staff of IIT Tirupati went for 7K FUN RUN on July 28, 2019, at the site of the permanent campus. This run, in true sense, was a fun for all the members of IIT Tirupati family. This run was actually organised to familiarise the newly inducted students of the Institute with the permanent campus site.



# Samvid

#### **SPIC MACAY**

SPIC MACAY Virasat Series was conducted between August 10-18, 2019. The series included two workshops—a paper mache workshop by Smt. Hema Devi and a Seraikela mask making workshop by Shri Dilip Acharya. It also comprised performances by renowned artists, including, Pt. Vishwa Mohan Bhatt (Mohana Veena), Shri Madan Gopal Singh (Sufi), Pt. Raghunandan Panshikar (Hindustani Vocal) and the Dhananjayans (Bharatnatyam).

#### Inter - IIT Sports Meets

A strong contingent of 87 students from IIT Tirupati participated in the **54**<sup>th</sup> **Inter-IIT Sports Meet** jointly hosted by IIT Kharagpur and IIT Bhubaneswar during December 14-22, 2019. Apart from athletic events, students also participated in cricket, football, basketball (men and women), badminton (men and women), table tennis, chess, and volleyball. The following were the notable performances:

- Snegha (2<sup>nd</sup> year, Electrical Engineering) reached the finals of the women's 400m and the semi-finals of the women's 200m events
- S. Spandana (3<sup>rd</sup> year, Civil Engineering) finished 6<sup>th</sup> in the women's high jump
- K. Uday Kiran (2<sup>nd</sup> year, Electrical Engineering), entered the semi-finals of the men's 100 m
- Aswath P. (3<sup>rd</sup> year, Mechanical Engineering) entered the semi-finals of the 400 m events.
- IIT Tirupati finished 13<sup>th</sup> out of 23 IITs in the Chess event.

Faculty and Staff members from IIT Tirupati participated in various sports events of the **26**<sup>th</sup> **Inter-IIT Staff Sports Meet** held at IIT Kharagpur during December 24-28, 2019. In the athletic events, the performance of Mr. V. Vasudeva Rao (Physical Training Instructor) was outstanding where he

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garnered two Gold Medals – one in the 400 m (57.0 seconds) running and the other in the high jump (1.6 meters). In the long jump event, Mr. Bijoy (Junior Technician, Mechanical) finished fourth. In the table tennis and volleyball events, IIT Tirupati performed creditably in the league stage and made it to the quarter finals.

#### Inter-IIT Tech Meet 8.0

IIT Tirupati secured 11<sup>th</sup> position in the Overall General Championship of the Inter-IIT Tech Meet 8.0, surpassing all the 3<sup>rd</sup> generation and some of the second generation IITs. A contingent of 40 students from IIT Tirupati participated in this Tech Meet that was held at IIT Roorkee during December 20-22 2019. IITT students won a gold medal in Ashoka's Tech for Change Challenge, a silver medal in BOSCH's Route Optimization Algorithm and a bronze medal in DIC's Terrace Farming Robot for Hilly Areas.

#### Al Hackathon - 2019

A team of five 3<sup>rd</sup> year B. Tech students participated in Al Hackathon–2019, conducted by NVIDIA, CDAC and AtOS; and secured the Runner up position for their work on Spoken Language Identification.

#### National Students Space Challenge - 2019

IIT Tirupati students participated in National Students Space Challenge–2019 organised by IIT Kharagpur in association with ISRO, and made their presence visible by securing prizes. The teams comprising Uday Krishna, Surya Ganesh and Chaitanya bagged the first prize in "The Braitenberg Challenge", a hardware coding Hackathon; and another team consisting of Sathvik, Anirudh, Sai Pavan and Surya Prakash secured fourth position in Sonorous, a space based robotics challenge.

#### Swachchhata Awareness Activities in Villages

IIT Tirupati in association with Mahatma Gandhi National Council of Rural Education (MGNCRE) prepared a comprehensive sanitation management plan as a part of the Swachchhata Action Plan. A group of 20 students from IIT Tirupativisited Jangalpalli and Chindepalli villages on December 6-9, 2019, and conducted door to door survey to create awareness about Open Defecation Free and Swachchha Village.

#### **Blood Donation Camp**

A Voluntary blood donation camp was organized by IIT Tirupati in association with Sri Venkateswara Institute of Medical Science on November 10, 2019. There was an overwhelming response from the students and other donors. A total of 95 people contributed to this noble cause. The donors received a certificate of recognition.

**Editors** 

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