

# **List of All MEC Publications**

# (Journals / Conferences / Book Chapters / Patents)

# <u>Journals</u>

- Sanjukta Das, "Controllability of a Neutral Stochastic Evolution Equation", Journal of Mathematics and Statistical Science (ISSN 2411-2518, USA), http://www.ss-pub.org/, Paper ID: No. JMSS2020090101; (2020) (Accepted)
- Sanjukta Das, "Controllability of a conformable fractional differential system with nonlocal condition and deviated argument", Nonlinear Dynamics and Systems Theory, InforMath publishing group; (2020) (Accepted)
- 3. Sanjukta Das, "Controllability of a class of conformable fractional differential system", Journal of Control and Decision, Taylor Francis Group; (2020); <u>https://doi.org/10.1080/23307706.2020.1857314</u>
- 4. R. Basu, "A new formula for investigating delay integro-differential equations using differential transform method involving quotient of two functions", Rocky Mountain Journal of Mathematics; (2020)(Accepted).
- 5. P. Biswas, S. Ghosh, and **B. P. PAL**, "Spectral response of a short optical pulse in a dispersion oscillating specialty fiber with higher order nonlinearities", Asian J Phys., Special issue on Plasma Physics, Optics and Photonics, Energy Studies and Education Management dedicated to Prof. M. S. Sodha, (2020) (In press).
- 6. D. Roy Chowdhury, P. Pal, and **B. P. PAL**, "Thin Film Sensing with Terahertz Metamaterials", Asian J Phys. Special issue on Optical Information Processing, Holography, Fourier Optics dedicated to Prof. T. S. Yu, (2020) (In press).
- 7. Preeti Jha, Aruna Tiwari, **Neha Bharill**, Milind Ratnaparkhe, Mukkamalla Mounika and Neha Nagendra, "A Novel Scalable Kernelized Fuzzy Clustering Algorithm Based on In-Memory Computation for Handling Big Data", IEEE Transactions on Emerging Topics in Computational Intelligence;(2020) (Accepted).
- 8. K. N. Deepthi, Srubabati Goswami, Vishnudath K. N., and Tanmay Kumar Poddar, "Implications of the dark large mixing angle solution and a fourth sterile neutrino for neutrinoless double beta decay", Phys. Rev. D 102, 015020, (July 2020); doi: 10.1103/PhysRevD.102.015020
- 9. Sabyasachi Banerjee, **Bishnu Pal**, and **Dibakar Roy Chowdhury**, "Resonance Phenomena in Electromagnetic Metamaterials for the Terahertz Metamaterials: A Review", Journal of ElectroMagnetic Waves and Applications, 1-24, (2020); doi.org/10.1080/09205071.2020.1713227
- 10. **Sunny Rai** and Shampa Chakraverty. 2020. A Survey on Computational Metaphor Processing. ACM Comput. Surv. 53, 2, Article 24 (March 2020), 37 pages. DOI: https://doi.org/10.1145/3373265
- 11. Jyoti Gajrani, Umang Agarwal, Vijay Laxmi, **Bruhadeshwar Bezawada**, Manoj Singh Gaur, Meenakshi Tripathi, Akka Zemmari: EspyDroid+: Precise reflection analysis of android apps. Computers and Security 90: 101688 (2020)
- 12. Rakesh Sarkar, K Monica Devi, Dipa Ghindani, Shriganesh Prabhu, **Dibakar Roy Chowdhury**, and Gagan Kumar, "Polarization Independent double band electromagnetically Induced Transparency effect in terahertz metamaterials", Journal of Optics, 22, 035105 (2020)
- 13. N. Chamakuri and P. Kugler. "A coupled monodomain solver with optimal memory usage for the simulation of cardiac wave propagation", Applied Mathematics and Computation, 378:125212, (2020).
- 14. V. Dhanya Varma, **Nagaiah Chamakuri**, Suresh Kumar Nadupuri, "Discontinuous Galerkin solution of the convection-diffusion-reaction equations in fluidized beds", Applied Numerical Mathematics, Volume 153, Pages 188-201, (2020)
- T. Jagannadha Swamy, G. Ramamurthy and P. Nayak, "Optimal, Secure Cluster Head Placement Through Source Coding Techniques in Wireless Sensor Networks," in *IEEE Communications Letters*, vol. 24, no. 2, pp. 443-446, (Feb. 2020), doi: 10.1109/LCOMM.2019.2953850.
- 16. G. Rama Murthy, Rishi Pratap Singh and C. Naveen,"Wide Band Time Optimal Spectrum Sensing," International Journal of Internet Technology and Secured Transactions, Vol.10, No. 4, (2020)
- 17. **J Mahipal**, " A Highly Stable Explicit Scheme for a Fourth Order Nonlinear Diffusion Filter", Accepted for publication in International Journal of Modeling, Simulation, and Scientific Computing. (2020)

- 18. Murtaza Bohra, Arun Showry, Panagiotis Grammatikopoulos, and Vidyadhar Singh, Versatile Gold-Polymer Nanointerfaces Probed by GISAXS, Material Today Chemistry (in press)(2020).
- 19. Murtaza Bohra, TM Pavan, Vincent Fournée, RK Mandal, Growth, structure and thermal stability of quasicrystalline Al-Pd-Mn-Ga thin films Applied Surface Science, 505, 144494(2020).
- 20. Jetta, M., Chirala, S. "On Multi-Quadric Based RBF-FD Method for Second-Order Diffusion Filters". SN COMPUT. SCI. 1, 39 (2020). https://doi.org/10.1007/s42979-019-0046-4
- 21. **Prakash, J.** "Hydrodynamic mobility of a porous spherical particle with variable permeability in a spherical cavity". Microsyst Technol (2020). https://doi.org/10.1007/s00542-020-04801-0
- 22. Subhajit Karmakar, Deepak Kumar, Ravendra Varshney, and **Dibakar Roy Chowdhury**, "Lattice Induced Plasmon Hybridization in Metamaterials", , Accepted in Optics Letters (2020)
- 23. Deepak Kumar, Surya Pranav Ambatipudi, Sabyasachi Banerjee, Ranjan Kumar, and **Dibakar Roy Chowdhury**,"Multifold coupling Enabled High Quality factor Toroidal resonances in Terahertz Metasurfaces", Journal of Applied Physics, 127, 193103 (2020)
- 24. Subhajit Karmakar, Deepak Kumar, Ravendra Varshney, and **Dibakar Roy Chowdhury**, "Strong terahertz Matter Interaction induced Ultrasensitive Sensing in Fano Cavity based Metamaterials", Accepted in Journal of Physics D: Applied Physics (2020)
- 25. Aditya Abburi, Murtuza Ali, Prateek Moriya, "Synthesis of mesoporous silica nanoparticles from waste hexafluorosilicic acid of fertilizer industry", Journal of Materials Research and Technology (May 2020).
- 26. **S M Chetty**, S Mishra, and M Basu, "New Trends in Electric Motors and Selection for Electric Vehicle Propulsion Systems", IET Electrical Systems in Transportation, 2020 IET (In Press)
- 27. S M Chetty, M Rayguru, S Mishra, "Battery Super-Capacitor Hybrid System for Electrical Vehicle Transportation's Systems-An Energy Integrated Approach", IET Energy Systems Integration, 2020 IET (In press)
- 28. S M Chetty, L V Suresh, "The Black-Start Capability Improvement of VSC based HVDC Transmission System using Fuzzy adaptive PI controller", International Journal of Ambient Energy (TAEN)-2020- Taylor and Francis (In Press)
- 29. M.A. Khan, "Mix suitable for concrete 3D printing: A review." *Materials Today: Proceedings*, 2020, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2020.03.825 CiteScore 1.09

- 30. B. Bakshi (nee Kumari), A. Barh, S. Ghosh, R. K. Varshney, and **B. P. Pal** (Invited paper), Guided wave photonics for light sources, sensors and passive components at mid-IR, Asian J. Phys. vol. 28(10-12), Special issue, pp. 877-889 (2019).
- 31. S Jagan Mohan Rao, Rakesh Sarkar, Gagan Kumar, and **Dibakar Roy Chowdhury**, "Gradual Cross Polarization Conversion of Transmitted Waves in Near Field Coupled Planar Terahertz Metamaterials", OSA Continuum, 2, 603 (2019)
- 32. Subhajit Karmakar, Ravi Varshney, and **Dibakar Roy Chowdhury**, "Theoretical Investigation of Active Modulation and Enhancement of Fano Resonance in THz Metamaterials", OSA Continuum, **2**, 531 (2019)
- 33. **G. R. Gopinath** and P. D. Shyama, "Sensorless control of PMSM using an adaptively tuned SCKF," in *The Journal of Engineering*, vol. 2019, no. 17, pp. 4304-4308, 6 2019.
- 34. S. Karmakar, R. K. Varshney, **D. Roychowdhury**, and **B. P. Pal** (Invited paper), Fano resonances in THz metamaterials, Asian J Phys vol. 28, Nos. 7-9, Special Issue, pp. 663-688 (2019).
- 35. **Bezawada**, **B**, Ray, I, Ray, I. Behavioral fingerprinting of Internet-of-Things devices. WIREs Data Mining Knowl Discov. 2019; e1337. <u>https://doi.org/10.1002/widm.1337</u>
- 36. **N. Raghu Kisore** and K.Shiva Kumar, "FFRR: A software diversity technique for defending against buffer overflow attacks," International Journal of Information and Computer Security, Inderscience Publishers, Inderscience Publishers, (In Pre-Print).

- Venkata Koteswara Rao P, Hari Krishna P and C Hari Prasad, "Experimental and Numerical Investigation of Pile Group with And Without Building Frame Subjected To Axial Load" Indian Geotechnical Journal (2019) DOI: <u>https://doi.org/10.1007/s40098-019-00383-5</u> [Scopus and ESCI Indexed]
- 38. Jai Prakash, G. P. Raja Sekhar, "Effective viscosity of a concentrated suspension of composite porous spherical particles", Meccanica, Vol. 54 (6), 799-813, 2019.
- 39. Vemuri, J., Ehteshamuddin, S., Ravula, M., & Kolluru, S."Pushover analysis of soft brick unreinforced masonry walls using analytical and numerical approaches". Materials Today: Proceedings (2019) (<u>https://doi.org/10.1016/j.matpr.2019.10.025</u>)
- 40. Karmakar, S., Banerjee, S., Kumar, D., Kamble, G., Varshney, R.K. and **Roy Chowdhury**, **D**., Deep-Subwavelength Coupling-Induced Fano Resonances in Symmetric Terahertz Metamaterials. Phys. Status Solidi RRL, 13: 1900310, (2019) doi:<u>10.1002/pssr.201900310</u>
- 41. **Rai Sunny**, Jain Amita and Pandey Priyank, "Inclusion of Wikipedia, a language specific knowledge resource to generate and update a synset in WordNet", International Journal of Technology, Policy and Management, Interscience, Vol. 19, No. 4, (2019); DOI: <u>10.1504/IJTPM.2019.104062</u>
- 42. Ch. Nagaiah, Parallel and space-time adaptivity for the numerical simulation of cardiac action potentials, Applied Mathematics and Computation, Vol 353, 406-417, (2019).
- 43. B. Naresh Kumar Reddy, **Cheruku Ramalingaswamy**, R. Nagulapalli, and Dharavath Ramesh, "A Novel 8T SRAM with Improved Cell Density", Analog Integrated Circuits and Signal Processing, 98(2), 355-367, (2019) (Springer).
- 44. Anushree, Damoder Reddy Edla, Diwakar and **Ramalingaswamy Cheruku**, "Survey on Brain Computer Interface: An Emerging Computational Intelligence Paragigm", ACM Computing Survey, 2019, 52(1): 20:1-20:32 (2019)
- 45. **Ramalingaswamy Cheruku**, Charan, Gopi Krishna and **T. Veeraiah** etc. "Survey on Rule Extraction Algorithms: A Case Study on Type-2 Diabetes Data", International Journal of Innovative Technology and Exploring Engineering, 2019 (Accepted).
- 46. K. Swaroop, **R. Cheruku**, and D. Reddy Edla, "Cascading of RBFN, PNN and SVM for Improved Type-2 Diabetes Prediction Accuracy", *Ausjournal*, vol. 1, no. 1, pp. 24-27, Feb. 2019.
- 47. **Murtaza Bohra, DR Chowdhury**, V Singh and JF Bobo, "Anomalous electric transport across Verwey transition in nanocrystalline Fe<sub>3</sub>O<sub>4</sub> thin films", Journal of Applied Physics, 125, 013901(2019).
- 48. **Murtaza Bohra**, Nishit Agrawal, and Vidyadhar Singh, "A Short Review on Verwey Transition in Nanostructured Fe<sub>3</sub>O<sub>4</sub> Materials", Journal of Nanomaterials, Volume 2019, Article ID 8457383, 18 (2019).
- 49. V. Singh, A. Annadi, B.Bhoi, R. Madugundo, M. Muthu and **Murtaza Bohra**, "Synthesis, Properties, and Applications of Multifunctional Magnetic Nanostructures 2018", Volume 2019, Article ID 1847262, 3 (2019).
- 50. Babita Kumari, R. K. Varshney and **B. P. PAL**, "Design of a silicon-on-calcium-fluoride-based ultracompact and highly efficient polarization splitter for the mid-IR", Opt. Engg. vol. 58(3), 037102 (9 pages), doi: 10.1117/1.OE.58.3.037102 (2019).
- 51. Babita Kumari, R. K. Varshney and **B. P. PAL**, "Design of a promising silicon slot waveguide-based ultrashort low loss efficient polarization rotator for the mid-IR", Optik - International J. for Light and Electro Optics, vol. 180, pp. 71-83 (2019).
- 52. Vikas Kumar, Arun K Pujari, **Venkateswara Rao Kagita** and Vineet Padmanabhan, "Group Preserving Label Embedding for Multi-label Classification", Pattern Recognition, Vol.90, pages 23–34, (2019)
- 53. **S Jagan Mohan Rao**, Rakesh Sarkar, Gagan Kumar and Dibakar Roy Chowdhury, "Gradual Cross Polarization Conversion of Transmitted Waves in Near Field Coupled Planar Terahertz Metamaterials", OSA Continuum, **2**, 603 (2019)
- 54. Subhajit Karmakar, Ravi Varshney and **Dibakar Roy Chowdhury**, "Theoretical Investigation of Active Modulation and Enhancement of Fano Resonance in THz Metamaterials", OSA Continuum, **2**, 531 (2019)
- 55. Diwakar Tripathi, Damoder Reddy Edla, **Ramalingaswamy Cheruku** and Venkatanareshbabu Kuppili, "A novel hybrid credit scoring model based on ensemble feature selection and multilayer ensemble classification", Journal of Computational Intelligence (Willey), (2019), DOI: 10.1111/coin.12200

- 56. Koteswara, Venkata, Harikrishna Padavala, and **Hariprasad Chennarapu**. "Experimental investigation of axially loaded group of piles with and without building frame: a parametric study". Innovative Infrastructure Solutions, 4.(1), 1-9 (2019)
- 57. K. Jagadeesh Babu, B. Kiran Kumar, **Subba Rao Boddu** & A. M. Varaprasad "Design of a compact elliptical slot printed UWB antenna with band-notched characteristic", International Journal of Electronics Letters, 7:4, 448-457, (2019); DOI: 10.1080/21681724.2018.1525766
- 58. Tallapragada, Phanindra and Sudarsanam, Senbagaraman, "Chaotic advection and mixing by a pair of microrotors in a circular domain" Phys. Rev. E, Vol.100, Issue 6, 062207, (Dec 2019). DOI: <u>https://doi.org/10.1103/PhysRevE.100.062207</u>
- 59. O.P. Patel, N. Bharill, A. Tiwari, V. Patel, O. Gupta, J. Cao, J. Li, M. Prasad, "Advanced Quantum Based Neural Network Classifier and its Application for Objectionable Web Content Filtering", IEEE Access, vol. 7, pp. 98069-98082, (2019).

- 60. Babita Kumari, R. K. Varshney and **B. P. PAL**, "Design of a silicon on calcium fluoride-based compact and efficient polarization rotator for mid-IR", OSA Continuum vol. 1, No. 4, pp. 1158-1171 (2018).
- 61. Jagan M. Padbidri and Keshav Kashichenula, "Novel Kinematic Boundary Conditions for Deformation of Granular Materials", Journal of Coupled Systems and Multiscale Dynamics, Volume 6, Number 4, pp. 317-324(8), December (2018)
- 62. V.S. Kathavate, B. Praveen Kumar, I. Singh, **Palash Roy Choudhury**, K. Eswar Prasad, "Nanoindentation Response of PZT and NKN-NT Piezoceramics" Journal of Coupled Systems and Multiscale Dynamics, Volume 6, Number 4, pp. 291-299(9), December (2018)
- 63. Ch. Nagaiah, W. Neubert, S. Gilbert, J. Vierheller, G. Warnecke, M. Falcke, "Multiscale modeling and numerical simulation of calcium cycling in cardiac myocytes", SIAM Interdisciplinary Journal, Multiscale Modelling and Simulation,16(3), 1115–1145, (2018).
- 64. **Kalapatapu, P**. Shalini Chaudari, Nithin Kumar Singh and Aruna Malapati, "Content-based Clustering for Song Similarity using Self Organizing Maps", Elsevier Procedia Computer Science, 113, 115-123, (2018).
- 65. K Monika Devi, **Dibakar Roy Chowdhury**, Gagan Kumar and Amarendra Sarma, "Dual-band electromagnetically induced transparency effect in a concentrically coupled asymmetric terahertz metamaterial", Journal of Applied Physics, 124, 063106 (2018).
- 66. K Monika Devi, Maidul Islam, **Dibakar Roy Chowdhury**, Amarendra Kumar Sarma and Gagan Kumar, "Plasmon Induced Transparency in graphene based terahertz metamaterials", European Physics Letters, 120, 27005 (2018).
- 67. Jayasri Dontabhaktuni, Miha Ravnik and Slobodan Zumer, "Quasi-Crystalline colloidal tilings in thin nematic films", Crystals Special Issue "Structure and Properties of Quasicrystalline Materials", 8(7), 275 (2018).
- 68. Sadguna, N. and **Subbarao**, **SSV**., "Adaptive Signal Control for Non-lane based Vehicle Movements", International Journal of Traffic and Transport Engineering, vol. 8: 2, pp. 249-260, (2018).
- 69. N. Lahbabi, K. C. Bulusu, J.-F. Helard and M. Crussiere, "Very Efficient Tone Reservation PAPR Reduction Fully Compatible with ATSC 3.0 Standard: Performance and Complexity Analysis for Practical Implementation", IEEE Access, vol. 6, pp. 58355-58372, (2018).
- 70. S.S.K.C. Bulusu, M. Crussière, J. Hélard, R. Mounzer, Y. Nasser, O. Rousset and A. Untersee, "Quasioptimal Tone Reservation PAPR Reduction Algorithm for Next Generation Broadcasting Systems: A Performance/complexity/latency Trade-off with Testbed Implementation", IEEE Transactions on Broadcasting, vol. 64, no. 4, pp. 883-899, (2018).
- 71. **Subbarao Boddu**, "Analysis of Design Parameters in Flexible Reuse Deployments of OFDMA Downlink Cellular Networks", Asian Journal of Convergence in Technology, Vol. 4, issue 1, pp. 1-6, ISSN NO: 2350-1146 I.F-5.11, (2018).

- 72. C. Gurnani, S. L. Hawken, A. L. Hector, R. Huang, M. Jura, W. Levason, J. Perkins, G.Reid, and G. Stenning, "Tin (iv) chalcogenoether complexes as single source precursors for the chemical vapour deposition of SnE2 and SnE (E= S, Se) thin films", Dalton Transaction., Vol. 47, pp.2628-2637, (2018).
- 73. S. L. Benjamin, C. H. de Groot, **C. Gurnani**, S. L. Hawken, A. L. Hector, R. Huang, M. Jura, W. Levason, G. Reid and G. Stenning, "Compositionally tunable ternary Bi2 (Se1– x Te x)3 and (Bi1– y Sby)2Te3 thin films via low pressure chemical vapour deposition", Journal of Materials Chemistry C vol.6 (29), pp. 7734-7739, (2018).
- 74. M. Nazeer and **G. Rama Murthy**," Energy Efficient, Data Centric Routing Algorithm in Mobile Wireless Sensor Nodes (Energy Savings Quantification)," JCSE International Journal of Computer Sciences and Engineering, pp. 127-135, Vol-6, Issue-10, October 2018, E-ISSN: 2347-2693.
- 75. **S Jagan Mohan Rao**, Yogesh Shrivastava, Gagan Kumar and **Dibakar Roy Chowdhury**, "Modulating Fundamental resonance in Capacitive Coupled Assymetric Terahertz Metamaterials", Scientific Reports, 8, 16773 (2018).
- 76. S Jagan Mohan Rao, Gagan Kumar, Abul Azad and **Dibakar Roy Chowdhury**, "Ultrfast Relaxation of Charge Carriers induced switching in Terahertz Metamaterials", Journal of Infrared Millimetre and Terahertz Waves, 39 (12), 1211 (2018).
- 77. **G. Rama Murthy** and Alexander Rumyantsev," On an exact solution of the rate matrix of G/M/1-type Markov Process with small number of phases," Journal of Parallel and Distributed Computing, Elsevier Science, Vol.119, pages 172-178, September 2018.
- 78. Satyanarayana Nimmala, Ramadevi Y., **Cheruku Ramalingaswamy**, "A Novel Approach to Predict High Blood Pressure using ABF Function", International Journal of Modern Education and Computer Science, 10(7), 67-73, (2018).
- 79. N. Satyanarayana, Y. Ramadevi, R.Sahith and **Ramalingaswamy Cheruku**, "High blood pressure prediction based on AAA++ using machine-learning algorithms", Cogent Engineering , 5(1),pp.1-12, Taylor and Francis, (2018).

- 80. N. Raghu Kisore, and Ch.Bala Koteshwariah, "Improving ATM Coverage Area Using Density Based Clustering Algorithm and Voronoi Diagrams," International Journal of Information Sciences, Elsevier Publishers, Vol 376, pp. 1-20 (2017).
- 81. M. Bendahmane and **Ch. Nagaiah**, "Numerical analysis for an optimal control of bidomain-bath model", Journal of Differential Equations, Vol 263(5), 2419-2456, (2017).
- 82. Ch. Nagaiah and K. Kunisch, "Primal-dual active set strategy for large scale optimization of cardiac defibrillation", Applied Mathematics and Computation, Vol 292, 178-193, (2017).
- 83. **Jai Prakash** and G. P. Raja Sekhar, "Slow motion of a porous spherical particle with a rigid core in a spherical fluid cavity", Meccanica, Vol. 52, pp. 92-105, (2017).
- 84. Sanjukta Das, "Approximate Controllability of an Impulsive Neutral Differential Equation with Deviating Argument and Bounded Delay", Journal of Fractional Calculus and Applications, Vol. 8(2), pp. 132-142. ISSN: 2090-5858, July 2017, http://fcag-egypt.com/Journals/JFCA/.
- 85. **Kalapatapu, P**., Tejas, N. N., Dalmia, S., Gupta, P., Inguva, B., and Malapati, A., "A novel similarity measure: Voronoi audio similarity for genre classification", International Journal of Intelligent Systems Technologies and Applications, 16(4), 309-318, (2017)
- 86. Rui Li, Alex X. Liu, Sheng Xiao, Hongyue Xu, **Bezawada Bruhadeshwar** and Ann L. Wang: *Privacy and Integrity Preserving Top-k Query Processing for Two-Tiered Sensor Networks*. IEEE/ACM Transactions on Networking 25(4): 2334-2346 (2017)
- 87. Maidul Islam, **Dibakar Roy Chowdhury**, Amir Ahmed and Gagan Kumar, "Terahertz Plasmonic Waveguide based Thin Film Sensors", IEEE Journal of Lightwave Technology, 35, 5215 (2017).
- 88. Maidul Islam, Jagan Mohan Rao, Gagan Kumar, **Bishnu Pal** and **Dibakar Roy Chowdhury**, "Role of resonance modes on Terahertz Metamatrials based Thin Film Sensors", Scientific Reports, 7, 7355 (2017).

- 89. Jagan Mohan Rao, Deepak Kumar, Gagan Kumar and **Dibakar Roy Chowdhury**, "Probing the near field inductive coupling in broadside coupled terahertz metamaterials", IEEE Journal of Selected Topics in Quantum Electronics, 23(4), 1 (2017).
- Koijam Monika Devi, Amarendra Kumar Sarma, Dibakar Roy Chowdhury and Gagan Kumar, "Plasmon Induced Transparency effects through alternatively coupled Resonators in Terahertz Metamaterials", Optics Express, 25, 10484 (2017).
- 91. Jagan Mohan Rao, Deepak Kumar, Gagan Kumar and Dibakar Roy Chowdhury, "Modulating the near field coupling through resonator displacement in planar terahertz metamaterials", Journal of Infrared millimeter and Terahertz Waves, 38, 124 (2017).
- 92. Maidul Islam, **Dibakar Roy Chowdhury**, Amir Ahmed and Gagan Kumar, "Terahertz Guided Mode Properties in an internally corrugated Plasmonic Waveguide", Journal of Applied Physics, 122, 053105 (2017).
- 93. **Murtaza Bohra**, Panagiotis Grammatikopoulos, Vidyadhar Singh, Junlei Zhao, Evropi Toulkeridou, Stephan Steinhauer, Joseph Kioseoglou, Jean-François Bobo, Kai Nordlund, Flyura Djurabekova and Mukhles Sowwan, "Tuning the onset of ferromagnetism in heterogeneous bimetallic nanoparticles by gas phase doping", Physics Review Material, 1, pp. 066001 (2017).
- 94. V Singh, R Madugundo, A Annadi, B Bhoi, KD Chandrasekhar and **Murtaza Bohra**, "Synthesis, Properties, and Applications of Multifunctional Magnetic Nanostructures", Journal of Nanomaterials, 2638715, pp. 2 (2017).
- 95. **Murtaza Bohra**, Kartikeya Negi, Varun Karthik Y. S., Hsiung Chou, X. Wang and W. K. Chu, "Origin of abnormal structural transformation in a (BiPb)FeO3/SrRuO3/SrTiO3 hetero-structure probed by Rutherford backscattering", Scientific Reports, 7, 4501(2017).
- 96. **Murtaza Bohra** and S.C. Sahoo, "Large magnetocaloric effect at Verwey point in nanocrystalline Fe3O4 thin films", Journal of Alloys and Compounds, 699, 1118 (2017).
- 97. Dinu, M.J., Mandla V.R., **Subbarao, SSV**, Rao, N.S., and Moses, S.A., "Assessment of Coastal Water Quality along South West Coast of India using Multiple Regression Analysis on Satellite Data", Journal of Rural Development, vol. 37: 2, pp. 269-284, (2017).
- 98. Sairam N., **Venkata Dilip Kumar** P. and Archanaa Dongre, "Impact on Structural Behavior due to installation of Billboard", Jurnal Teknologi, Vol.79, No.6, pp 89–98, DOI: http://dx.doi.org/10.11113/jt.v79.10208, (2017).
- 99. K. Ranjith, "Antiplane slip and bonded contact waves at a planar interface between two elastic layers", Journal of Applied Mechanics, 84 (10), 104501, (2017).
- 100. H K Kundu, S Ray, K Dolui, V Bagwe, **P Roy Choudhury**, S. B. Krupanidhi, T Das, Pratap Raychaudhuri, and Aveek Bid, "Quantum Phase Transition in Few-Layer NbSe2 Probed through Quantized Conductance Fluctuations", Phys. Rev. Lett. 119, 226802 (2017).
- 101. P. Kondaiah and K. Shankar, "Pyroeffects on Magneto-Electro-Elastic Sensor patch subjected to Thermal load", Int. Journal of Smart Structures and Systems, 19, 299-307, (2017).
- 102. A. Barh, R. K. Varshney, **B. P. Pal**, J. Sanghera and B. Shaw, "Thermally controlled mid-IR bandgap engineering in all-glass chalcogenide microstructured fibers: A numerical study", J. Opt. (IOP), vol. 19, 065603 (7 pp), (2017).
- 103. C. Passiu, A. Rossi, L. Bernard, D.Paul, J.Hammond, W. E. S. Unger, N. V. Venkataraman and N. D. Spencer, "Fabrication and Microscopic and Spectroscopic Characterization of Planar, Bimetallic, Micro- and Nanopatterned Surfaces", Langmuir, 33 (23), pp 5657–5665, (2017).

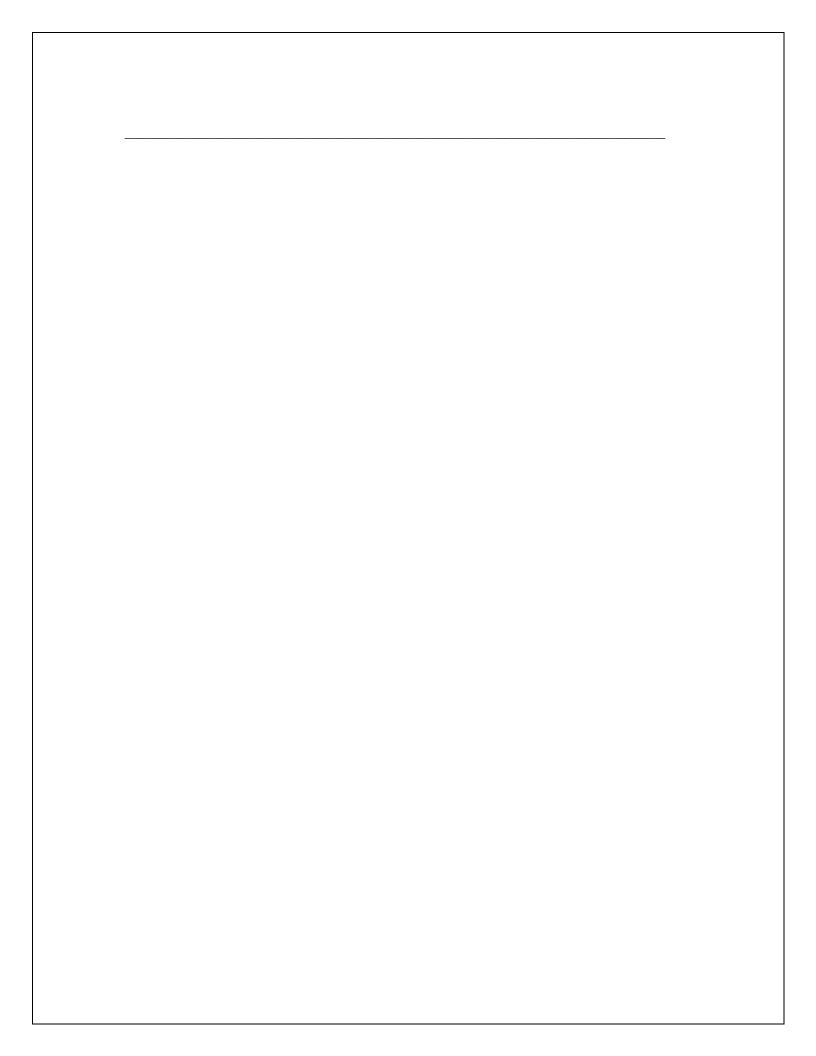
104. M. Bendahmane, **Ch. Nagaiah**, B. Aïnseba and E. Comte, "A 3D boundary optimal control for the bidomain-bath system modeling the thoracic shock therapy for cardiac defibrillation", Journal of Mathematical Analysis and Applications, Vol 437, 972-998, (2016).

- 105. Olga M. Lavrenteva, **Jai Prakash** and Avinoam Nir, "Effect of added mass on the interaction of bubbles in a low Reynolds number shear flow", Physical Review E, Vol. 93, pp. 023105, (2016)
- 106. J Mahipal, SK Sharma and S Sundar, "On a generalized 5 × 5 stencil scheme for nonlinear diffusion filtering", International Journal of Advances in Engineering Sciences and Applied Mathematics, vol. 8, pp 194-206 (2016).
- 107. Sanjukta Das, D. N. Pandey and N. Sukavanam, "Existence of solution and approximate controllability of a second-order neutral stochastic differential equation with state dependent delay", Acta Mathematica Scientia Volume 36, Issue (5), 1509-1523, (2016).
- 108. Liu, Kriti Agarwal, Yuping Zhang, Dibakar Roy Chowdhury, Abul K. Azad and Jeong-Hyun Cho, "Displacement current mediated resonances in Terahertz Metamaterials", Advanced Optical Materials, 4, 1312 (2016) 10.1002/adom.201600196.
- 109. L. Cong, N. Xu, **D. Roy Chowdhury**, M. Manjappa, C. Rockstuhl, W. Zhang and R. Singh, "Non-radiative and Radiative Resonance Energy Transfer in a Meta-molecule", Advanced Optical Materials, 4, 252 (2016).
- 110. **Murtaza Bohra**, Vidyadhar Singh, Panagiotis Grammatikopoulos, Evropi Toulkeridou, Rosa E Diaz, Jean-François Bobo and Mukhles Sowwan, "Control of Surface Segregation in Bimetallic NiCr Nanoalloys Immersed in Ag Matrix", Scientific Reports, 6, 19153 (2016).
- 111. **Murtaza Bohra**, K Eswar Prasad, Ravi Bollina, SC Sahoo and Naresh Kumar, "Characterizing the hase purity of nanocrystalline Fe3O4 thin films using Verwey transition", Journal of Magnetism and Magnetic Materials, 418, 137 (2016).
- 112. Saraswathi Chirakkara, **Palash Roy Choudhury**, K K Nanda and S B Krupanidhi, "Understanding Pt-ZnO: In Schottky nanocontacts by conductive atomic force microscopy", Mater. Res. Express, 3 045023 (2016).
- 113. Babita Kumari, A. Barh, R. K. Varshney and **B. P. Pal**, "Silicon-on-Nitride slot waveguide: A promising platform for mid-IR trace gas sensor", Sensors and Actuators B, vol. B236, pp.759-764, (2016).
- 114. Ajanta Barh, R. K. Varshney, **B. P. Pal**, G. P. Agrawal and B. M. A. Rahman, "Design of a polymer-based hollow-core band-gap fiber for low-loss Terahertz transmission", IEEE Photon Tech Letts., vol. 28, No. 15, August 1, pp. 1703-1706, (2016).
- 115. A. Barh, **B. P. Pal**, G. P. Agrawal, R. K. Varshney and B. M. A. Rahman, "Specialty fibers for terahertz generation and transmission: a review (Invited)", IEEE J. Selected Topics in Quant. Electron., vol. 22, No. 2, 8500215, 15 pages, (2016).
- 116. R. Huang, S. L. Benjamin, C. Gurnani, A. L. Hector, W. Levason, G. Reid and C. H. De Groot, "Nanoscale arrays of antimony telluride single crystals by selective chemical vapor deposition", Scientific. Reports. Vol 6, pp 27593, (2016).

- 117. E Lišková-Jakubisová, Š Višňovský, P Široký, D Hrabovský, J Pištora, **M Bohra**, "Nanocrystalline zinc ferrite films studied by magneto-optical spectroscopy", Journal of Applied Physics, 117 (17), 17B726 (2015).
- 118. Manoj K. Yadav, "Initial boundary value problems for some damped nonlinear conservation laws", Electronic Journal of Qualitative Theory of Differential Equations, No. 86, 1-11, (2015).
- 119. **Dibakar Roy Chowdhury**, Ningning Xu, Weili Zhang and Ranjan Singh, "Resonance tuning due to Coulomb interaction in strong near field coupled metamaterials", Journal of Applied Physics, 118, 023104 (2015).
- 120. Sumeet Walia, Charan Manish Shah, Philipp Gutruf, Hussein Nili, **Dibakar Roy Chowdhury**, Withawat Withayachumnankul, Madhu Bhaskaran and Sharath Sriram, "Flexible Metasurfaces and Metamaterials: A Review of Materials and Fabrication processes at Micro- and Nano-Scales", Applied Physics Review, 2, 011303 (2015).
- 121. M V Rasna, K. P. Zuhail, U V Ramudu, R Chandrasekhar, J Dontabhaktuni and S Dhara, "Orientation, interaction and laser assisted self-assembly of organic single-crystal micro-sheets in a nematic liquid crystal", Softmatter, 11, 7674-7679 (2015).

- 122. M Bohra, P Grammatikopoulos, RE Diaz, V Singh, J Zhao and JF Bobo, "Surface Segregation in Chromium-Doped NiCr Alloy Nanoparticles and Its Effect on Their Magnetic Behavior", Chemistry of Materials, 27 (9), 3216 (2015).
- 123. Salome Benhur, "Introduction: American Poetry and Drama", Block –I, course III, M.A English Part-2, The English and Foreign University, Hyderabad (2015).
- 124. P. Kondaiah, K. Shankar and N. Ganesan, "Pyroeffects on magneto-electro-elastic sensor bonded on mild steel cylindrical shell", Int. Journal of Smart Structures and Systems, 16, 537-554, (2015).
- 125. A. Barh, R. K. Varshney, G. P. Agrawal, B. M. A. Rahman and **B. P. Pal**, "Plastic fiber design for THz generation through wavelength translation", Opt. Letts., vol. 40, No. 9, 2107-2110, (2015).
- 126. C. Gurnani, N. Đorđević, S. Muthaiah, D. Dimić, R. Ganguly, M. Petković and D. Vidović, "Extending the chemistry of carbones: P–N bond cleavage *via* an S<sub>N</sub>2'-like mechanism", Chemical. Communications. vol 51, pp.10762-10764, (2015).
- 127. A. Gomathi, Susan M. Vickers, Rahman Gholami, Mina Alyani, Renee W. Y. Man, Mark J. MacLachlan, Kevin J. Smith and Michael O. Wolf, "Nanostructured Materials Prepared by Surface-Assisted Reduction: New Catalysts for Methane Oxidation", Appl. Mater. Interfaces, vol. 7: 19268 (6 pp), (2015).

- 128. P. Kondaiah, K. Shankar and N. Ganesan, "Pyroeffects on multiphase magneto-electro-elastic sensor patch bonded on mild steel plate", Int. Journal on Smart sensing and Intelligent systems, 7, 1134-1155, (2014)
- 129. V Singh, P Grammatikopoulos, C Cassidy, M Benelmekki, **M Bohra**, "Assembly of tantalum porous films with graded oxidation profile from size-selected nanoparticles", Journal of Nanoparticle Research, 16 (5), 1-10 (2014).
- 130. RE Diaz, **M Bohra**, V Singh, M Sowwan, "In-situ Scanning Transmission Electron Microscopy Annealing Studies of Ni1-xCrx Nanocluster and Correlation with Magnetic Properties", Microscopy and Microanalysis, 20 (S3), 1664 (2014).
- 131. **M Bohra**, V Singh, M Sowwan, JF Bobo, CJ Chung, B Clemens, "Influence of packaging on the surface oxidation and magnetic properties of cobalt nanocrystals", Journal of Physics D: Applied Physics, 47 (30), 305002 (2014).
- 132. M Benelmekki, **M Bohra**, JH Kim, RE Diaz, J Vernieres, "A facile single-step synthesis of ternary multicore magneto-plasmonic nanoparticles", Nanoscale, 6 (7), 3532 (2014).
- 133. JH Kim, **M Bohra**, V Singh, C Cassidy, M Sowwan, "Smart Composite Nanosheets with Adaptive Optical Properties", ACS Applied Materials & Interfaces, 6 (16), 13339 (2014).
- 134. Jayasri Dontabhaktuni, Regina Jose, K. P. N. Murthy and V. S. S. Sastry, "Effect of phase shift between geometrical and chemical patterning in nematic liquid crystal cells: A Monte Carlo Study", J. Comp. Mater. Sci., 92, 238-243, (2014).
- 135. Jai Prakash, Olga M. Lavrenteva and Avinoam Nir, "Application of Clebsch variables to fluid-body interaction in presence of non-uniform vorticity", Physics of Fluids, Vol. 26, pp. 077102, (2014).
- 136. Debjani, S. and **Bhattacharya and A.K**., "Synthesis of CFD and Monte-Carlo simulations for improved design and operation of Dense Medium Cyclones", Computers and Fluids (Elsevier), Vol. 96, June 2014, pp. 47-62, http://dx.doi.org/10.1016/j.compfluid.2014.02.012.
- 137. Bhattacharya, A.K., Kouluri, M.K., Srinivas P.S. and Vishal, V., "Online Adaptation of Detection Algorithms in Breakout Prevention Systems for Continuous Casters based on temperature pattern spectral content", Tata Search Journal, Vol. 2, pp. 253-259, (2014)
- 138. P. Kondaiah, K. Shankar and N. Ganesan, "Pyroeffects on multiphase Magneto-Electro-Elastic Sensor patch bonded on mild steel plate", Int. Journal on Smart Sensing and Intelligent Systems, 7, 1134-1155 (2014).
- 139. B. P. Pal, "Optical fiber sensors: a versatile technology platform for sensing (Invited)", J. Indian Institute of Science (Special issue on Fiber Optic Sensors), vol. 94, No. 3, pp. 283-309, (2014).



# International/National Conferences/Workshops

# 2021

- 1. S.R. Gautam, M. Jahnavi, P. Thangeda and **A.K. Bhattacharya**, "Synthesis of optimal trajectories in tactical aerial engagements using Multi-Objective Evolutionary Algorithms", Advances in Multidisciplinary Analysis and Optimization, Lecture Notes in Mechanical Engineering, Springer Singapore, 2021 (Accepted).
- 2. Hariprasad Chennarapu, Karthik Malapati, and Sasanka Mouli, "Effect of variation of friction angle along the depth in design of Mechanically Stabilized Earth Wall", International Conference on Transportation Geotechnics (2021), Springer. (accepted).

# 2020

- 3. Rahul Arulkumaran, Shreyas Rajesh, A.K. Bhattacharya and Sai Kiran Narahari, "Real Time Predictions of Adverse Digressions in Critical and Noisy Industrial Processes Using LSTMs", 2020 IEEE-HYDCON, Hyderabad, Sep 11-12.
- 4. **G. Rama Murthy**, Vidya Sree, Jyothi, Mahalakshmi and Manasa Jagannadham," Deep Neural Networks: Incremental Learning," To appear in the Proceedings of Intellisys 2020, Springer publishers
- 5. K. Inthiyaz and **G. Rama Murthy**, 'Novel Deep Learning Architectures: Feature Extractor and Radial Basis Function Neural Network,' International Conference on Computational Performance Evaluation (ComPE), 2020
- 6. S. Thapa, D.K. Jain, P. Singh, **N. Bharill**, A. Gupta, M. Prasad, "Data-Driven Approach based on Feature Selection Technique for Early Diagnosis of Alzheimer Disease", Proc. of 2020 IEEE World Congress on Computational Intelligence, IEEE, Glasgow Scotland, 19-24 July, (2020)
- J. H. Go, T. Jan, M. Mohanty, O. P. Patel, D. Puthal and M. Prasad, "Visualization Approach for Malware Classification with ResNeXt", IEEE World Congress on Computational Intelligence (IEEE CEC 2020), Scottish Event Campus Ltd, Glasgow, United Kingdom, July 2020 (Rank B)
- 8. Alexander Rumyantsev and **G. Rama Murthy**,"Steady State and Transient Analysis of a Single Channel Cognitive Radio Model with Impatience and Balking, " ICAAPSP 2020, Springer Publishers
- 9. Satyanarayana C. "RBF-FD Based Method of Lines with an Optimal Constant Shape Parameter for Unsteady PDEs". In: Dutta D., Mahanty B. (eds) Numerical Optimization in Engineering and Sciences. Advances in Intelligent Systems and Computing, vol 979. (2020) Springer, Singapore
- 10. Jetta M., Chirala S."On Stability of Multi-quadric-Based RBF-FD Method for a Second-Order Linear Diffusion Filter. In: Dutta D., Mahanty B. (eds) Numerical Optimization in Engineering and Sciences. Advances in Intelligent Systems and Computing, vol 979. (2020) Springer, Singapore
- 11. Singh S.B & Amin S.S., "Crowde: Peer-2-Peer funding for prosperous farming", International case conference Katastasi, (04 Jan 2020), Fortune Institute of International Business, New Delhi
- 12. **Paromita Bose**, "Caste Politics in the Cultural Realm: Drawing and Reading Discrimination". International Symposium, "Research in the Arts, The Arts in Research" Cultural Literacy in Europe (CLE) organised and hosted by University of Lodz, Poland over Zoom (May 2020).

- 13. K. Sahil and A. K. Bhattacharya, "Accurate Replication of Simulations of Governing Equations of Processes in Industry 4.0 Environments with ANNs for Enhanced Monitoring and Control," 2019 IEEE Symposium Series on Computational Intelligence (SSCI), Xiamen, China, 2019, pp. 1873-1880.
- 14. Sushanth Reddy Amanaganti, **Jayasri Dontabhaktuni**, "High refractive index dielectric rings in liquid crystals as tunable metasurfaces," Proc. SPIE 11025, Metamaterials XII, 110250J (30 April 2019); https://doi.org/10.1117/12.2520768

- 15. S. P. R. Bairaju, S. Ari and **R. Murthy Garimella**, "Emotion Detection using Visual Information with Deep Auto-Encoders," 2019 IEEE 5th International Conference for Convergence in Technology (I2CT), Bombay, India, 2019, pp. 1-5.
- I. B. Kattubadi and R. M. Garimella, "Emotion Classification: Novel Deep Learning Architectures," 2019 5th International Conference on Advanced Computing & Communication Systems (ICACCS), Coimbatore, India, 2019, pp. 285-290.
- 17. R. M. Garimella, S. D. Munugoti and A. Rayala, "Novel Ceiling Neuron Model and its Applications," 2019 International Joint Conference on Neural Networks (IJCNN), Budapest, Hungary, 2019, pp. 1-8.
- 18. Ganesh Y., Sri Teja A., Munnangi S.K., **Rama Murthy G**. (2019) A Novel Framework for Fine Grained Action Recognition in Soccer. In: Rojas I., Joya G., Catala A. (eds) Advances in Computational Intelligence. IWANN 2019. Lecture Notes in Computer Science, vol 11507. Springer, Cham
- 19. B. Perabathini, K. Tummuri, A. Agrawal, and V. Varma, 'Efficient 3D placement of UAVs with QoS assurance in ad hoc wireless networks', The 28th International Conference on Computer Communications and Networks (ICCCN 2019) July 29 August 1, 2019, Valencia, Spain ICCCN 2019
- 20. Venkata Koteswara Rao P, Hari Krishna P and **C Hari Prasad**, "A Parametric Study of Axial Loaded Group of Piles with and Without Building Frame by Using Experimental and Numerical Studies", National Conference on Geotechnical Applications, GeoApps 2019, 30 Mar 2019, IIT Hyderabad.
- 21. Subbarao, SSV., Swaroop, Somasekhar (2019). "Interrelationships between mode choice and trip chain choice decisions in the context of developing countries", 15th World Conference on Transportation Research (WCTR), 26-31 May 2019, Mumbai
- 22. A. Abburi and V. R. Abburi, "Controlled synthesis of hydroxyapatite nanoparticles," 2019 IEEE 14th International Conference on Nano/Micro Engineered and Molecular Systems (NEMS), Bangkok, Thailand, 2019, pp. 300-303, doi: 10.1109/NEMS.2019.8915677.
- 23. G. Rama Murthy," Variance Laplacian: Quadratic Forms in Statistics," International Conference on Advances in Applied Probability & Stochastic Processes (ICAAP&SP), January 2019
- 24. Sayantan Hazra, Burst error analysis in hybrid satellite-terrestrial broadcasting systems for high velocity receivers, Accepted for Publication, IEEE 12<sup>th</sup> International Workshop on Selected Topics in Wireless and Mobile Computing, Networking and Communications (STWiMob), Barcelona (2019)
- 25. Hossein Shirazi, **Bruhadeshwar Bezawada**, Indrakshi Ray, Charles Anderson," Adversarial Sampling Attacks Against Phishing Detection", In 33rd Annual IFIP WG 11.3 Conference, DBSec 2019: 83-101, Charleston, SC, USA, July 15–17
- 26. Bruhadeshwar Bezawada, Indrajit Ray and Kushagra Tiwary, "AGBuilder: An AI Tool for Automated Attack Graph Building, Analysis and Refinement", In 33rd Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec'19) Charleston, SC, USA July 15-17, 2019
- 27. **Ravi Kishore**, Anupriya Inumella and Kannan Srinathan. "Perfectly secure message transmission over partially synchronous networks". In Proceedings of the 20th International Conference on Distributed Computing and Networking, ICDCN 2019 (302-306), Bangalore, India, January 04-07, 2019. DOI: <u>https://doi.org/10.1145/3288599.3288612</u>.
- 28. Uma Maheswari Gollapudi, Rahul Arulkumaran, Manikumar Perla, Sai Hitesh Jonnalagadda, Amitava Das and Sunny Rai. Understanding User Vulnerability Towards Radicalization On Twitter. In 5th International Conference on Computational Social Science. 2019. Amsterdam Accepted for Oral Presentation
- 29. S. R. Amanaganti and J. Dontabhakuni, 'High refractive index dielectric rings in liquid crystals as tunable metasurfaces', Proc. SPIE-EOO, Prague (2019).
- 30. **Bishnu Pal**, Somnath Ghosh, Ajanta Barh and Ravi Varshney, "Application-specific Specialty Optical Fibers: A new Paradigm in Fiber Designs", Invited Paper, URSI-Asia-Pacific Radio Science Conference (AP-RASC 2019), India Habitat Center, New Delhi, March 9-15 (2019).
- 31. **T** .Veeraiah, **G** Rama Murthy and Ramalinga Swamy, " Optimal utilization of Spectrum Band Uing Doubly Cognitive Architecture based MAC Protocol for Small Satellite". Accepted for ICSS, DRDO-RCI, February 2019.

- 32. G. Rama Murthy and Alexander Rumyantsev,"G/M/1-type Markov Chain Model of Spread Spectrum (CDMA) Cognitve Radio Wireless Networks," International Conference on Advances in Applied Probability & Stochastic Processes (ICAAP&SP), January 2019.
- 33. Amrutha, Damoder reddy Edla, **Ramalingaswamy Cheurku**, Diwakar Tripathi, "GWO-GA based Load Balanced and Energy Efficient Clustering Approach for WSN", SmartCom-2019, Bankok.
- 34. Seth Deep, Vardhan Varma V.K.H., Anirudh P., Kalyan P. (2019)" Preliminary Design of Soft Exo-Suit for Arm Rehabilitation". In: Duffy V. (eds) Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management. Healthcare Applications. HCII 2019. Lecture Notes in Computer Science, vol 11582. Springer, Cham
- 35. **Tabitha Chekuri**, 'Exploring Pre-service Teachers' Reflective Thinking and Professional Growth in Practicum', Canada International Conference on Education (CICE-2019), University of Toronto, Canada, (June 2019).
- 36. B. N. K. Reddy, K. Sarangam, **T. Veeraiah** and R. Cheruku, "SRAM cell with better read and write stability with Minimum area," *TENCON 2019 2019 IEEE Region 10 Conference (TENCON)*, Kochi, India, (2019), pp. 2164-2167, doi: 10.1109/TENCON.2019.8929593.
- 37. G. Rama Murthy, Vamshi Krishna Reddy, Devaki and Divya," Optimal Synthesis of Hopfield Associative Memory," Proceedings of ICMLDS 2019, (December 2019). To appear in ACM Digital Library
- 38. Sabyasachi Banerjee, Deepak Kumar, Sanket Goel, **Bishnu P Pal**, and **Dibakar Roy Chowdhury**, "Thin Film Sensing with Assymetric Terahertz Metasurfaces", IEEE WRAP, IIT Guwahati (2019)
- 39. Subhajit Karmakar, Ravendra K Varshney, and **Dibakar Roy Chowdhury**, "Displacement Sensing using Terahertz Metasurfaces", IEEE WRAP, IIT Guwahati (2019)

- 40. Padmalaya Nayak, **G. Rama Murthy** and Ajay Chepuri," A Novel Approach to Routing Protocol for Mobile Sink in Wireless Sensor Network to Enhance the Network Lifetime," 10th International Conference on Advanced Computing (ICoAC-2018), 13-15 December 2018
- 41. G. Rama Murthy, M.Nazeer and Padmalaya Nayak," Energy Efficient Design of Mobile Wireless Sensor Networks: Constrained Clustering" Proceedings of International Conference on Wireless Sensor Networks, Ubiquitous Computing and Applications, August (2018).
- 42. B. Siva Raju, A. Sowmya and **G. Rama Murthy**," Facial Emotion Detection using Deep Autoencoders," Proceedings of International Conference on Recent Innovations in Electrical, Electronics and Communications Engineering (ICRIEECE ), July (2018).
- 43. G. Rama Murthy, M.Nazeer and Padmalaya Nayak," Energy Efficient Design of Mobile Wireless Sensor Networks: Constrained Clustering" To appear in the Proceedings of International Conference on Wireless Sensor Networks, Ubiquitous Computing and Applications, August (2018)
- 44. Padmalaya Nayak, G. Rama Murthy and Ajay Chepuri," A Novel Approach to Routing Protocol for Mobile Sink in Wireless Sensor Network to Enhance the Network Lifetime," 10th International Conference on Advanced Computing (ICoAC-2018), 13-15 December (2018).
- 45. **Rai, Sunny**, Apar Garg and Shampa Chakraverty. "Understanding the Role of Visual Features in Emoji Similarity." In International Conference on Intelligent Information Technologies, pp. 89-97. Springer, Singapore, (2018).
- Jetta M., Nalluri P., Dasari P. and Hitesh S. Fourth Order Nonlinear Diffusion Filters for Multiplicative Noise Removal. In: Mansouri A., El Moataz A., Nouboud F., Mammass D. (eds) Image and Signal Processing. ICISP 2018. Lecture Notes in Computer Science, vol 10884. Springer, Cham (2018).

- 47. P. Thangeda, A.K. Bhattacharya, R. Gopal and R.G. Ashok Kumar. Synthesis of Optimal Trajectories in Aerial Engagements using Differential Evolution. IFAC-PapersOnLine, Volume 51, Issue 1, 2018, Pages 90-97, DOI: https://doi.org/10.1016/j.ifacol.2018.05.016;www.sciencedirect.com/science/article/pii/S240589631830 1769
- 48. R. Ravinithesh, A.K. Bhattacharya and G. Rishita. Advance Predictions of critical digressions in a noisy industrial process- performance of Extreme Learning Machines versus Artificial Neural Networks. IFAC-PapersOnLine, Volume 51, Issue 1, 2018, Pages 98-105, DOI: https://doi.org/10.1016/j.ifacol.2018.05.017, also at

www.sciencedirect.com/science/article/pii/S2405896318301770.

- 49. R. Ravinithesh, A.K. Bhattacharya and Niranjan Reddy, Adaptive Critic Design for Extreme Learning Machines applied to Noisy and Drifting Industrial processes. IEEE Symposium Series on Computational Intelligence, Nov 2018, Bangalore, DOI: 10.1109/SSCI.2018.8628664
- 50. C. Zhang, A. Agrawal, V. Varma, and S. Lasaulce. *Thresholding-based Distributed Power Control for Energy-Efficient Interference Networks*. 29<sup>th</sup> International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE PIMRC 2018), Bologna, Italy, 9-12 September
- 51. B. Siva Raju, A. Sowmya and **G. Rama Murthy**. *Facial Emotion Detection using Deep Autoencoders*. Proceedings of International Conference on Recent Innovations in Electrical, Electronics and Communications Engineering (ICRIEECE), July 2018 (awaited).
- **52. S Jagan Mohan Rao**, Maidul Islam, Gagan Kumar, **Bishnu Pal and Dibakar Roy Chowdhury**. *Single Split Ring Resonator based terahertz metamaterials for refractive index sensing*. SPIE Photonics West, 10531, 105311K (2018).
- 53. N Lok Abhishikht, Sabyasachi Banerjee, Shashank Rangu, Sreekar Kamireddy, Abul K Azad and Dibakar Roy Chowdhury. *Controlling extra ordinary transmission through hole arrays using subwavelength periodic structures*. JTu2A.39 (2018).
- 54. SaiPraneeth Madduri, Miha Ravnik and Jayasri Dontabhaktuni. Self-organized 3D Quasicrystalline structures in thin nematic films. International Liquid Crystal Conference, Japan (2018).
- 55. S. Amanaganti, D. R. Chowdhury, M. Ravnik and J. Dontabhaktuni. *Electromagnetic response of dielectric nanostructures in liquid crystals*. Proc. SPIE 9004, Emerging Liquid Crystal Technologies XIII, 105551F (2018).
- 56. K. Abhinav, Aditya Varma, P. Venkata Dilip Kumar, K. Prafulla, R. Bharghava and Rishaad Rishaad. DisCom: A Robust Post-Disaster Communication Infrastructure. 17th International symposium on new technologies for Urban Safety of Mega Cities in Asia (USMCA-2018), India, Dec.12-14.
- 57. D. Trishala, U. Lokesh, P. Venkata Dilip Kumar, K. Prafulla and B. Bhargava. Ancient Sandbox technique: An experimental study using Piezoelectric sensor. EUROMED, Cyprus, (2018).
- 58. K. Namratha Reddy, P Balaphani Krishna, P. Venkata Dilip Kumar and Prabhkar Singh. Three dimensional modelling and analysis of Historical structures. EUROMED, Cyprus, (2018).
- 59. K. Eshwar, **P Venkata Dilip Kumar**. *Progressive Collapse Analysis of Two-Dimensional Reinforced Concrete Framed Structure*. Innovations in Infrastructure, Advances in Intelligent Systems and Computing 757, Springer Nature, https://doi.org/10.1007/978-981-13-1966-2\_54, India, May.17-19 (2018).
- 60. G.P. Ramaguru, **P Venkata Dilip Kumar**. *Human Evacuation Simulation During Disaster: A Web Tool, Innovative Research in Transportation Infrastructure*. Lecture Notes in Intelligent Transportation and Infrastructure, Springer Nature, https://doi.org/10.1007/978-981-13-2032-3\_4, India, May.17-19, (2018).
- 61. Salome Benhur, "International Facilitator Development Programme", Hawaii, U.S.A, October 15-20, (2018).
- 62. M. K. Agrawal and S. K. Sahu. *Rewetting analysis of hot surface with property variation and precursory cooling*. 414, Proceedings of the 7<sup>th</sup> International and 45<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power (FMFP), December 10-12, 2018, IIT Bombay, Mumbai, India.
- 63. Sai Vinay Sayyapureddi, Vishnu Raju Nandyala, Akil Komarneni and Deep Seth. Design and Development of an Electric Skateboard Controlled Using Weight Sensors. In: Streitz N., Konomi S. (eds) Distributed,

Ambient and Pervasive Interactions: Understanding Humans. DAPI 2018. Lecture Notes in Computer Science, vol 10921. Springer, Cham.

- 64. Jagan M. Padbidri and Keshav Kasichenula. Simulation based study on the effect of boundary conditions in granular material deformation. Indian Geotechnical Conference 2018, Bengaluru, December 2018.
- 65. Phani Keerthan K S and Prasad P. *Performance Analysis of Al*<sub>2</sub>O<sub>3</sub> *Packed-Bed Energy Storage.* International Conference on Advanced Ceramics and Nanomaterials for Sustainable Development (AceND 2018), Bengaluru, 19 21 September, 2018.
- 66. **Prasad P**, and Sebastian U. *Exergy Analysis of Concentrated Solar Power (CSP) Plants using Direct Steam Generation (DSG) with Thermal Energy Storage (TES)*. Solar Power and Chemical Energy Systems (SolarPACES 2018), 2 5 October, Casablanca, Morocco, (2018).
- 67. Babita Kumari, R. K. Varshney and B. P. PAL, A Highly Sensitive SOI Ridge Slot Waveguide Biosensor for Label-free Detection of DNA Hybridization, 14th International conference Photonics 2018, IIT Delhi, New Delhi, India, Dec 12-15 (2018).
- 68. Harsh K. Gandhi, Piyali Biswas, **Bishnu Pal** and Somnath Ghosh, *Asymmetric Pulse Propagation through Time-dynamic Gain-loss Assisted Media*, -ibid-, New Delhi, India, Dec 12-15 (2018).
- 69. K. C. Bulusu, M. Crussiere and J.-F. Helard. *A Low Complexity PAPR Reduction Algorithm for ATSC 3 Transmitters*. IEEE International Symposium on Broadband Multimedia Systems and Broadcasting (BSMB 2018), Valencia, Spain, (2018).
- 70. **G. R. Gopinath** and S. P. Das. *Sensorless control of Permanent Magnet Synchronous Motor using an adaptively tuned Square-root Cubature Kalman Filter*. IET International Conference on Power Electronics, Machines and Drives (PEMD 2018), Liverpool, UK.
- 71. G. R. Gopinath and S. P. Das. *An Extended Kalman Filter based Sensorless Permanent Magnet Synchronous Motor Drive with Improved Dynamic Performance*. IEEE International Conference on Power Electronics Drives and Energy Systems (PEDES 2018), IIT Madras (Accepted).
- 72. Subbarao Boddu. Analysis of Design Parameters in Flexible Reuse Deployments of OFDMA Downlink Cellular Networks. 3rd IEEE International Conference for Convergence in Technology (I2CT), Pune, India, (2018).
- 73. **Subbarao Boddu** and Venkata Sudhakar Reddy Bandi. *Comparative Performance of Cognitive Cell Level Resource Allocation for OFDMA Downlinks*. 3<sup>rd</sup> IEEE International Conference for Convergence in Technology (I2CT), Pune, India, (2018).
- 74. **Subbarao Boddu** and Venkata Sudhakar Reddy Bandi. *A Cognitive Opportunistic Fractional Frequency Reuse scheme for OFDMA Uplinks*. 24<sup>th</sup> IEEE National Conference on Communications, IIT Hyderabad, India, (2018).
- 75. **G. Rama Murthy** and Alexander Rumyantsev," On the rate matrix R of a G/M/1- type Markov Process," Proceedings of SMARTY 2018, First International Workshop on Stochastic Modeling and Applied Research of Technology Petrozavodsk, Russia, September 21 25, 2018.
- 76. Damoder Reddy Edla, Diwakar, Venkatanaresh and **Ramalingaswamy Cheruku**, "Survey on Clustering Techniques", ICICCY-2018, India.
- 77. Beeram Sreekeerthee, Sushmita Kadarla and Jayaprakash Vemuri. *Statics and Kinematics of Eccentrically Braced Frames.* International Conference on Civil Engineering Practices and Trends, December 21-22, Hyderabad (2018).
- 78. **Padbidri, Jagan M.;** Microstructure sensitive modelling to identify crack growth regimes, International workshop on mechanics of energy materials, IIT Chennai, November 19 22, Chennai, (2018).
- 79. Gandham Laxmi Manisha, Shalin Mathew, Abhinav Kolla, Ayub Mohammad and **Jayaprakash Vemuri**. *The 2018 M7.9 Kodiak Earthquake*. Symposium on Current Challenges for Safe and Sustainable Structural Development, March 27-29, Gandhinagar (2018)
- 80. B. Siva Raju, A. Sowmya and G. Rama Murthy. *Emotion Detection using Visual Information with Deep Autoencoders*. Accepted for Proceedings of 2018 IEEE Symposium Series on Computational Intelligen ce (SSCI 2018)

- 81. P. Kondaiah, "Thermally Induced Vibration of Magneto-Electro-Elastic Structure under Transient Thermal Environment" 9th International Conference on Materials for Advanced Technologies (ICMAT2017), Suntec Singapore, June'2017.
- 82. Mahipal Jetta, S. K. Iliyas and T. Pranihith. *A fourth order diffusion filter for speckle noise removal*. In Proceedings of the International Conference on Video and Image Processing, ICVIP 2017, pages 197-201, NewYork, NY, USA (2017).
- 83. Amrita, A., Bhattacharya A.K., Hazra S. and Bhattacharya, J.L. Enhanced Loss of Life relations for IEEE Thermal model for ageing assessment of running transformers in Smart Grid frameworks. IEEE TENSYMP 2017, Cochin, July 2017, DOI: 10.1109/TENCONSpring.2017.8070020.
- 84. S Jagan Mohan Rao, Gagan Kumar and Dibakar Roy Chowdhury. Near Field Inductive Coupling in Terahertz Metamaterials. JSAP-OSA Joint Symposium, Tokyo, Japan, 7p\_A409\_10 (2017).
- 85. Praveen, **S., Subbarao**, SSV and Mandla, V.R. *Integrated Hybrid Renewable Energy System Site Suitability using GIS and Economic Way Production of Electricity*. International Conference on Geo-Spatial Technology for Natural Resource Management and Climate Change, India, Dec. 21-22, (2017).
- 86. Dinu, M.J., **Subbarao**, SSV, Rao, N.S., and Mandla, V.R. Assessment of Coastal Water Quality along South West Coast of India using Multiple Regression Analysis on Satellite Data. International Conference on Geo-Spatial Technology for Natural Resource Management and Climate Change, India, Dec. 21-22, (2017).
- D. Trishala, D. Vineesha, K. Gamanash, A. N. Prannoy, and P. Venkata Dilip Kumar. BIM: A Graphical User Interface to Generate a Three Dimensional Building. International Conference on Advanced Engineering and Information Technology, Malaysia, Dec.7-9, (2017).
- N. Sravya, T. Nihitha, P. Venkata Dilip Kumar and K. Prafulla. Crack Detection and Analysis Using Image Processing Techniques. International Conference on Advanced Engineering and Information Technology, Malaysia, Dec.7-9, (2017).
- 89. U. Lokesh, T. Likhith Reddy, C. Sai Sumanth, P. Venkata Dilip Kumar and R. Bharghava. *Design of a Seismograph using Winkler's model*. International Conference on Advanced Engineering and Information Technology, Malaysia, Dec.7-9, (2017).
- 90. C. Raaga Varshita, P. Priyanka and P. Venkata Dilip Kumar. Seismic Response Reduction of Tall Buildings Using Portal Frame as TMD. International Conference on Advanced Engineering and Information Technology, Malaysia, Dec.7-9, (2017).
- 91. M. Vivekananda, P. Venkata Dilip Kumar and D. Archanaa. *Comparison of Seismic Vulnerability between Regular and Irregular Structures*. International Conference on Advanced Engineering and Information Technology, Malaysia, Dec.7-9, (2017).
- 92. A. Maanasa, N. Shaik Ahmed, G. Ajith Kumar, D. Sri Krishna and P. Venkata Dilip Kumar. *Modeling and Modal Analysis for Cantilever Truss of an Airport Terminal*. International Conference on Advanced Engineering and Information Technology, Malaysia, Dec.7-9, (2017).
- 93. K. Namratha Reddy, P. Balaphani Krishna, P. Venkata Dilip Kumar and Prabhakar Singh. *Three Dimensional Modeling and Analysis of Historical Structural Columns*. International Conference on Advanced Engineering and Information Technology, Malaysia, Dec.7-9, (2017).
- 94. K. Eshwar and **P. Venkata Dilip Kumar**. *Structural Vibrations during Progressive Collapse*. 13th International Conference on Vibration Problems (ICOVP), IIT Guwahati, India, Nov 29 -Dec 2, (2017).
- 95. M. Mujeeb and **P. Venkata Dilip Kumar**. *Structural Vibrations Due to Vehicle Impact*. 13<sup>th</sup> International Conference on Vibration Problems (ICOVP), IIT Guwahati, India, Nov 29 -Dec 2, (2017).
- 96. C. Karun Kumar, D. Ramachander and **P. Venkata Dilip Kumar**. *Dynamic Analysis of Five Storey Building for Various Ground Motions*. 13<sup>th</sup> International Conference on Vibration Problems (ICOVP), IIT Guwahati, India, Nov 29 -Dec 2, (2017).
- 97. Salome Benhur, "XV Theory/Praxis Course" organised by The Forum on Contemporary Theory, EFL University, Hyderabad, July 3-29, (2017).

- N. Sairam, P. Venkata Dilip Kumar and D. Archanaa. Seismic Analysis of a Residential building with Communication Tower. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 99. P. Krishna Chaitanya, K. Jayanth Katuri and P. Venkata Dilip Kumar. 2004 Sumatra Tsunami Wave 2017, *Propagation Using Bathymetry and MATLAB*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 100. D. Ramachander, C. Karun Kumar, P. Venkata Dilip Kumar and T. Ilango. *Seismic Response of IS Code Designed Five storey Structure for Different Earthquake Ground Motions*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 101. M. Vivekananda, **P. Venkata Dilip Kumar** and Archanaa Dongre. *Numerical Assessment and Comparison of Seismic Vulnerability of Structures Based On Geometry*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 102. M Mujeeb, P. Venkata Dilip Kumar and D. Archanaa. *Analysis of Structural Impact Due to Vehicle Using Time History*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 103. K. Rakesh, P. Venkata Dilip Kumar and D. Archanaa. *Methods to Reduce Seismic Response of Soft-Storey Structure*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 104. N. Vishwanath Reddy, G. Sathyaprakash, **P. Venkata Dilip Kumar** and D. Archanaa. *Time History Analysis of Structure with Five Floor Parking Ramp and Ten Floor Super Structure*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 105. K. Venkata Sai Kiran and **P. Venkata Dilip Kumar**. *Domes as a Sustainable Structure for Future Generation*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 106. K. Eshwar, P. Venkata Dilip Kumar, Atul B Pujari and D. Archanaa. Progressive Collapse Analysis of Three-Dimensional Reinforced Concrete Structure. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 107. P. Govardhan, **P. Venkata Dilip Kumar** and D. Archanaa. *Effect of Pylon Shape On Seismic Behaviour of Cable Stayed Bridges*. 4th International Conference on Earth Sciences and Engineering, Padang, Indonesia, Aug.29-31, (2017).
- 108. Salome Benhur. *Radical Evil and Moral Faith*. International Conference on Religion and Spirituality in Society, Imperial College, London, April 17-18, (2017).
- 109. **Tabitha Chekuri** and Sweta Mukherjee. *Re-visualizing classroom spaces: Integrating flipped classroom as a pedagogical model*. Conference for Researchers of English Language on English Language Studies in Contemporary Indian context: Issues and Challenges organized by University of Hyderabad, Hyderabad, March (2017).
- 110. **Tabitha Chekuri** and Sweta Mukherjee. *Understanding classroom spaces and teacher roles*. AINET International Teacher Research Conference, Nagpur, September (2017).
- 111. P. Biswas, S. N. Ghosh, R. K. Varshney, A. Biswas and **Bishnu Pal**. *Parametric dependence of self-similar propagation of parabolic pulses in a dispersion oscillating fiber*, 24th Congress of the International Commission of Optics (ICO-24), Tokyo, Aug. 21-25 (2017).
- 112. S. N. Ghosh, R. K. Varshney and **Bishnu Pal**. Controlling light beam dynamics in ordered and disordered waveguide lattices with gain and loss. -ibid-. (2017).
- 113. S. Ghosh, R. K. Varshney and **B. P. Pal**. *Diffusive dynamics and signature of phase singularities in gain/loss assisted disordered optical waveguide lattices*. Frontiers in Optics FiO 2017, Washington, DC, Sept. 16-20 (2017).
- 114. Jay Dave, Parvez Faruki, Vijay Laxmi, **Bruhadeshwar Bezawada** and Manoj Gaur. 2017. Secure and efficient proof of ownership for deduplicated cloud storage. In Proceedings of the 10th International Conference on Security of Information and Networks (SIN '17). ACM, New York, NY, USA, 19-26. DOI: https://doi.org/10.1145/3136825.3136889

- 115. Bruhadeshwar Bezawada, Alex X. Liu, Xiaojiang Liang and Rui Li: A template approach for group key distribution in dynamic ad-hoc groups. Networking 2017: 1-9
- 116. Subbarao Boddu and Jagadeesh Babu Kamili. Analysis of Design Parameter Issues for Next Generation OFDMA Downlinks. Progress in Electromagnetics Research Symposium (PIERS -FALL), IEEE Xplore, DOI: 10.1109/PIERS-FALL.2017.8293597\_Singapore, pp. 2707-2717, (2017).
- 117. Subbarao Boddu, et al. *Design of a Compact octagonal UWB MIMO Antenna Employing Polarization Diversity Technique*. Progress in Electromagnetics Research Symposium (PIERS -FALL), IEEE Xplore, DOI: 10.1109/PIERS-FALL.2017.8293427, Singapore, pp. 1785-1789, (2017).
- 118. Subbarao Boddu, et al. *Design of a MIMO Dielectric Resonator Antenna with Air Gap for X-Band Applications*. Progress in Electromagnetics Research Symposium (PIERS -FALL), IEEE Xplore, DOI: 10.1109/PIERS-FALL.2017.8293435, Singapore, pp. 1835-1838, (2017).
- 119. J. L. Bhattacharya and D. Roychowdhury, *Modelling of SQUID Metamaterials*, IEEE Workshop on Recent Advances in Photonics (WRAP2017), Dec 17-18, MEC, Hyderabad (2017).
- 120. C. Gurnani, W. Levason and G. Reid. *Chemical Vapour Depositions of Main Group chalcogenides*. UK India Symposium on Functional Materials, University of Edinburgh, UK, June 21-23<sup>rd</sup> (2016).
- 121. C. Gurnani, W. Levason and G. Reid. *Selective Chemical vapor deposition of Antimony Telluride*. 28th Annual General Meeting of Material Research Society of India (MRSI-2017) IIT-Bombay, Mumbai, February 13-15, (2017).
- 122. Bezawada B., Kothapalli K., Raman D., Li R. (2017) *Symmetric Key Based Secure Resource Sharing*. In: Thampi S., Martínez Pérez G., Westphall C., Hu J., Fan C., Gómez Mármol F. (eds) Security in Computing and Communications. SSCC 2017. Communications in Computer and Information Science, vol 746. Springer, Singapore.
- 123. Aditya Gupta, PLN Manikumar, R.N. Reddy and A.K. Bhattacharya. Extreme Learning Machines with frequency based noise filtering for prediction of critical digressions in a noisy industrial process. 14<sup>th</sup> IEEE INDICON, Dec 15-17, Roorkee, (2017).

- 124. Bhattacharya, A.K. and Rajasekar, K. Advance Prediction of Adverse Digressions in Continuous-Time Systems Using ANN Kernels: A Generic Approach Instantiated in Steel Manufacturing. Springer Series on Advances in Intelligent Systems and Computing, Vol 509, DOI: 10.1007/978-981-10-2525-9, Oct. 2016, Ch. 7, pp 67-79, http://link.springer.com/chapter/10.1007/978-981-10-2525-9\_7
- 125. Bhattacharya, A.K. and Sambasivam, D. *Multi-objective Differential Evolution for automated control of Industrial Process input material composition incorporating supply-side* fluctuations. IEEE Conference on Evolutionary Computation, Vancouver, July 2016, DOI: 10.1109/CEC.2016.7744169
- 126. Balouek-Thomert, D., **Bhattacharya**, A.K., Caron, E., Karunakar, G. and Lefevre, L. *Parallel Differential Evolution Approach for Cloud Workflow placements under simultaneous optimization of multiple objectives*. IEEE Conference on Evolutionary Computation, Vancouver, July 2016, DOI: 10.1109/CEC.2016.7743876
- 127. Shashank Rangu, Kamireddy Sreekar, Raviniteish Reddy, Murtaza Bohra and Dibakar Roy Chowdhury. *Magnetic Metamaterials: A comparative study of resonator geometry and metal conductivity*. Conference on Computational Physics (CCP), IIT Guwahati (2015), Journal of Physics: Conference Series, 759, 012044 (2016).
- 128. Maidul Islam, **Dibakar Roy Chowdhury and Gagan Kumar**. *Terahertz Guided mode propagation in a planar plasmonic waveguide and slow light properties*. OSA International Conference on Photonics and Fibre Optics, P1A.21 (2016).
- 129. Murtaza Bohra, Varun Karthik Y. S., G. Haveesh, Tarun Y. S. N., D. Roy Chowdhury and K. Eswar Prasad. *Comparative study of magnetite (Fe*<sub>3</sub>O<sub>4</sub>) *thin films grown by pulsed laser ablation and sputtering*. AIP Conference Proceedings, 1728, 020551 (2016).

- 130. Paromita Bose. *Changing Cityscapes: Real City, Mythic Hero*. International Conference, "Crossroads in Cultural Studies" Association for Culture Studies (ACS) hosted by University of Sydney and University of Western Sydney, (2016).
- 131. Tabitha Chekuri, Workshop on 'Mapping Recent Trends in ELT', The Christ University, Bangalore, February (2016)
- 132. Salome Benhur. *Moral Law and Freedom of Will*. International Conference on Sociology of Religion in a Pluralistic Society, Jadavpur University, WB, April 7-9, (2016).
- 133. Rui Li, Wenjie Li, Bruhadeshwar Bezawada and Zheng Qin: Topological ordering based iterative TCAM rule compression using bi-partite graphs. 24<sup>th</sup> IEEE International Conference on Network Protocols (ICNP) 2016: 1-2
- 134. B. Kumari, R. K. Varshney and **B. P. Pal**. *Novel silicon-on-nitride rib slot waveguide for low and flat dispersion at mid-IR wavelength regime: A parametric design*. International conference on Fiber optics and Photonics, PHOTONICS2016, IIT Kanpur, Dec. 5-8 (2016).
- 135. B. Kumari, R. K. Varshney and **B. P. Pal**. Design of SOI rib slot waveguide with enhanced evanescent field for optical sensing. Frontiers in Optics FiO 2016, Rochester, NY, Oct. 17-21 (2016).
- 136. P. Biswas, S. Ghosh, A. Biswas and **B. P. Pal**. Self-similar propagation in dispersion managed and highly nonlinear segmented bandgap fiber in the mid-IR. Frontiers in Optics FiO 2016, Rochester, NY, Oct. 17-21 (2016).
- 137. B.P. Pal, Application-specific Specialty Microstructured Optical Fibers for Mid-IR and THz Photonics, 2016, Plenary talk, International Conf. on Photonics and Fiber Optics PHOTONICS2016, IIT Kanpur, Dec. 5-8.

- 138. Dibakar Roy Chowdhury, Hou-Tong Chen and Antoinette J. Taylor. *Tuning of terahertz metamaterials'* resonances via near field coupling. Abul K. Azad, Proceedings SPIE, 9483, (2015).
- 139. E Lišková-Jakubisová, Š Višňovský, P Široký, D Hrabovský, J Pištora and **M Bohra**. *Ellipsometry and magnetooptical Kerr effect study of nanocrystalline zinc ferrite thin films*. Conference Proceedings: International Conference on Signal Processing and Communication (ICSC). DOI: 10.1109/ICSPCom.2015.7150657 (2015).
- 140. A. Barh, R. K. Varshney and **B. P. Pal**. *Terahertz guidance through hollow core plastic photonic bandgap fibers: Sensitivity to structural parameters*. IEEE Workshop on Recent Advances in Photonics (WRAP2015), IISc Bangalore, Dec. 16-17 (2015).
- 141. Somnath Ghosh and **B. P. Pal**. *Strong confinement of light in ultra-small volumes via proximity resonances: Interplay between noise and Q-factor*. International Conference on Optics and Photonics ICOP2015, Kolkata, Feb 20-22 (2015).
- 142. A. Barh, R. K. Varshney, **B. P. Pal**, J. Sanghera and L. B. Shaw. *Temperature assisted band-gap engineering in all-solid chalcogenide holey fiber for mid-IR application.* -ibid-. (2015).
- 143. Babita Kumari, A. Barh, R. K. Varshney, and B. P. Pal. Mid-IR Evanescent Field Gas Sensor Based on Siliconon-Nitride Slot Waveguide. - ibid- (2015).
- 144. **B.P. Pal**, *The International Year of Light 2015 and Light-based Technologies An Introspection*, 2015, Keynote address, IEEE International Conference on Telecommunication and Photonics (ICTP2015), Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh, Dec 26-28.
- 145. **B. P. Pal**, *All-fiber THz Generation and Transmission*, 2015, UKIERI Trilateral Project Workshop on Science and Technology of THz Radiation, IIT Delhi, Dec 21.
- 146. B.P. Pal, About IYL 2015 and Few Emerging Light-based Technologies, 2015, IEEE Workshop on Recent Advances in Photonics (WRAP2015), IISc, Bangalore, Dec 16-17.
- 147. B.P. Pal, Designs of Application-specific Microstructured Optical Fibers for Mid-IR Photonics, International Workshop on Emerging Areas in Photonics and Future Applications (IWEPFA-2015), 2015, CGCRI, Kolkata, Dec 7-12.

- 148. Agarwal, R., Goyal, A., Sambasivam, D. and Bhattacharya, A.K. Parallelization of industrial process control program based on the technique of differential evolution using multi-threading. IEEE International Conference on Industrial Engineering and Engineering Management, Singapore, Dec 2014, DOI: 10.1109/IEEM.2014.7058697
- 149. Ajanta Barh, R. K. Varshney, **B. P. Pal**, G. P. Agrawal, and B. M. A. Rahman. *Band-gap fiber for Efficient THz Transmission*. PHOTONICS2014, IIT Kharagpur, Dec. 14-16 (2014).
- 150. Ajanta Barh, R. K. Varshney, **B. P. Pal**, G. P. Agrawal and B. M. A. Rahman. *Efficient Terahertz Generation in a Novel Microstructured-Core Double Clad Plastic Fiber*, -ibid- (2014).
- 151. Ajanta Barh, Babita Kumari, R. K. Varshney and **B. P. Pal**. SOI Slot Waveguide Based on-Chip Trace Gas Sensor in the Mid-IR. JSAP-OSA Joint Symposium, Sapporo, Hokkaido, Japan, September 17-20, (2014).
- 152. Salome Benhur, "International Advanced Leadership Seminar", Hawaii, U.S.A, September 2-29, (2014).
- 153. Miha Ravnik, Jayasri Dontabhaktuni, Miha Cancula and Slobodan Zumer, "Nematic tilings as photonic materials", Proc. SPIE 9004, Emerging Liquid Crystal Technologies IX, 90040C (2014).
- 154. B.P. Pal, Specialty Optical Fibers for mid-IR Photonics, IEMOPTRONIX-2014, Kolkata, Dec 17-18.
- 155. **B.P. Pal**, Confinement of Light in Disordered Photonic Lattices: A new Platform for Wave guidance, 2014, International Conf. on Photonics and Fiber Optics PHOTONICS2014, IIT Kharagpur, Dec. 14-16.
- 156. **B.P. Pal**, Specialty Optical Fibers and All-Fiber Devices for mid-IR Photonics, 2014, Australian Institute of Physics Congress, ANU Campus, Canberra, Dec. 7-10.
- 157. B.P. Pal, *Application-specific Specialty Optical Fibers*, 2014, URSIGASS 2014 XXXI General Assembly and Scientific Symposium of the International Union of Radio Science (Union Radio Scientifique Internationale), Beijing, China, August 17-23.

# **Book Chapters**

- 1. H. Narayan and **A.K. Bhattacharya**, "Accurate, real-time replication of governing equations of physical systems with Transpose CNNs for Industry 4.0 and Digital Twins", in Machine Learning in Industry, eds. J. P. Davim and S. Datta, ISSN: 2365-0532, Springer Switzerland, 2021 (Accepted).
- 2. Ganesh Babu Kodeboyina, "Mathematical Modeling of Concrete Mixture Proportioning", CRC Press, Taylor & Francis group, 296pp. (Mar 2020). (ISBN: 978-0-3673-3480-2)
- 3. Sravya Koppuravuri, Sukumar Sai Pondari and **Deep Seth**, "Sign Language to Speech Converter Using Raspberry-Pi", Book:Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management. Human Communication, Organization and Work, Chapter No: 3, Springer Nature(2020) LNCS-12199. Chapter DOI:10.1007/978-3-030-49907-5\_3
- 4. Vishal Reddy Gade, Ashish Soni, Bharghava Rajaram, and **Deep Seth**, "Semi-Autonomous Collaborative Mobile Platform with Pre-Diagnostics for Hospitals", Book:Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management. Human-Robot Interaction, Chapter no. 30, Springer Nature (2020), LNCS 12198. Chapter DOI: 10.1007/978-3-030-49904-4\_30
- 5. Subramaniam, K. V. L., and Mohd Ataullah Khan (Eds). "Advances in Structural Engineering." *Springer Nature Singapore Pte Ltd. 2020;* Online ISBN: 978-981-15-4079-0 DOI: https://doi.org/10.1007/978-981-15-4079-0
- 6. **Vemuri J.**, Subramaniam K.V.L. "Seismic Fragility Assessment of Unreinforced Masonry Shear Walls". In: Subramaniam K., Khan M. (eds) Advances in Structural Engineering. Lecture Notes in Civil Engineering, vol 74. (2020) Springer, Singapore (https://doi.org/10.1007/978-981-15-4079-0\_1)
- Vemuri, J., & Kolluru, S. (2020). Evaluation of Ground Motion Scaling Techniques. In Advances in Computer Methods and Geomechanics (pp. 525-535). Springer, Singapore. (http://doi.org/10.1007/978-981-15-0886-8\_43)
- Singh S.B & Amin S.S, "Crowde: Peer-2-Peer funding for prosperous farming", Management Practices in the New Millennium, Asheesh Pandey, p11-19, (Jan 2020) Bloomsbury Publication, ISBN 978-93-89714-92-0
- Saride S., Umashankar B., Avirneni D. (eds) Advances in Geotechnical and Transportation Engineering. Lecture Notes in Civil Engineering, vol 71. (2020) Springer, Singapore. Print ISBN 978-981-15-3661-8, Online ISBN 978-981-15-3662-5
- A.K. Sharma, M. Modak, S. K. Sahu, M. K. Agrawal, "Infrared Thermal Imaging Technique for Temperature Measurement in Various Energy Systems" in: Dynamics and Control of Energy Systems, Springer Nature Singapore Pte Lte. (2019)
- 11. **Murtaza Bohra**, "Chapter 5: Nanostructured Magnetite Thin Films: an avenue for Spintronics", Nanostructured Thin Films: Fundamentals and Applications (Elsevier) (2019). **(ISBN: 9780081025727)**
- 12. Damoder Reddy Edla, Pudunayak, Tejaswini, Hareesh and **Ramalingaswamy Cheruku**, "Credit Scoring using Birds Swarm Optimization", in Computer and Cyber Security: Principles, Algorithm, Applications, and Perspectives, Taylor and Francis, (2019). **(ISBN : 9780815371335)**
- 13. M.K. Agrawal, "Application of variational integral method to analyze variety of rewetting problems "Heat Conduction: Methods, Application and Research", Jordan Hristov and Rachid Bennacer, Nova Science Publishers, Inc. USA, (2018). (ISBN: 9781536146745)
- 14. Subbarao Boddu, Chapter 7: "Qos Provisioning in OFDMA Networks", Evolution of Air Interface towards 5G-Radio Access Technology and Performance Analysis, River Publishers, (2018). (ISBN: 9788793609815)
- Paromita Bose, "Writing Self, Writing for Others", in the book "Influence of English on Indian Women Writers: Voices from the Regional Languages," Ed. K Suneetha Rani, Sage Publications, (2017). (ISBN: 9789381345153)
- K. C. Bulusu, "Chapter 18: High Power Amplifier Effects and Peak to Average Power Ratio Mitigation", Orthogonal Waveforms and Filter Banks for Future Communication Systems, (Elsevier/Academic Press) (2017). (ISBN: 9780128103845)

- 17. **B. P. Pal** and Parama Pal, "Fiber Optic Sensors" in the book LIGHT AND ITS MANY WONDERS, Eds. A. Ghatak, A. Pathak, and V. P. Sharma, Viva Books, New Delhi, pp. 284-307, (2016). **(ISBN: 8130934280)**
- 18. **Paromita Bose**, "Devadasi Reform in Colonial South India: The case of Radhika Santwanam", in the book Transcultural Negotiations of Gender: Studies in (Be)longing. Heidelberg Studies on Transcultural Research, Springer. pg- 114-121, (2015). **(ISBN: 9788132224372)**

# Patents Published/Filed

- 1. **Dibakar Roy Chowdhury,** Sabyasachi Banerjee "Hand held Metasurface-Based Microbe Detection Device (H2M2D2)" Application Number: 202041026401; Date of Filing: 23.06.2020, **Publication Date**: 04/12/2020
- Dibakar Roy Chowdhury, Subhajit Karmakar, Ravi Varshney, Sabyasachi Banerjee and Deepak Kumar "Stacked Fano Metamaterials based thin film sensors"; Application Number: 202041003489; Date of Filing: 27/01/2020, Publication Date:01/05/2020
- 3. **Chitra Gurnani**, Sai Madhavan and Sai Tati Teja, "Portable Modular Interlocking and Low-Cost Redox Flow Cell Stack Unit" **Filed** Patent application number is 202041048937 (Nov 2020).
- 4. Amrita Agnes, Arya K. Bhattacharya, and Sayantan Hazra."System and Method for Loss of Life calculation for Ageing Assessment of running Transformers in a Smart Grid Framework". US 2018-0003759 A1. Date of Filing: 26.04.2017, Publication Date: 01.04.2018.
- 5. Arya K. Bhattacharya, Sayantan Hazra and Amrita Agnes. "System and method for accurately monitoring and computing ageing life of a transformer in a smart grid framework". Application Number: 201621022408; Date of Filing: 30.06.2016, Publication Date: 05.01.2018.