

Sheoran, M.; Bhar, K.; Jain, S.; Rana, M.; Khan, T. A.; Sharma, A. K. **(2019)**, Dinuclearphenoxo-bridged copper(II) complexes: Syntheses, crystal structures and catecholase activity. *Polyhedron*, 161, 169-178. **Impact Factor = 2.067**

Singh, A. K.; Gothwal, A.; Rani, S.; Rana, M.; Sharma, A. K.; Yadav, A. K.; Gupta, U. **(2019)**, Dendrimer Donepezil Conjugates for Improved Brain Delivery and Better in vivo Pharmacokinetics. *ACS Omega*, 4, 4519-4529. **Impact Factor = 2.58**

Raj, M. V. N.; Bhar, K.; Jain, S.; Rana, M.; Khan, T. A.; Sharma, A. K. **(2019)**, Syntheses, X-ray structures, electrochemical properties and biological evaluation of mono- and di-nuclear N2O2-donor ligand-Fe systems. *Transition Metal Chemistry*, 44(7), 615-626. **Impact Factor = 1.05**

Raj, M. V. N.; Bhar, K.; Khan, T. A.; Jain, S.; Perdih, F.; Mitra, P.; Sharma, A. K. **(2019)**, Temperature induced spin crossover behaviour in mononuclear cobalt(II) bis terpyridine complexes. *MRS Advances*, 4 (28-29), 1597-1610.

Khan, T. A.; Bhar, K.; Thirumoorthi, R.; Roy, T. K.; Sharma, A. K. **(2020)**, Design, Synthesis, Characterization and Evaluation of Anticancer Activity of Water-Soluble Half-sandwich Ruthenium (II) Arene Halido Complexes. *New Journal of Chemistry*, 44, 239-257. **Impact Factor = 3.288**

Rajput, A.; Sharma, A. K.; Barman, S. K.; Saha, A.; Mukherjee, R., **(2020)**, Valence tautomerism and delocalization in transition metal complexes of o-aminophenolates and other redox-active ligands. Some recent results. *Coord. Chem. Rev.*, 414, 213240. **Impact Factor = 15.367**

Jain, S.; Bhar, K.; Kumar, S.; Bandyopadhyaya, S.; Tapryal, S.; Mandal, C. C.; Sharma, A. K. **(2020)**, Heteroleptic trimethoxy terpyridine-Cu(II) complexes: Synthesis, Characterization, DNA/BSA Binding, DNA Cleavage and Cytotoxicity Studies, *Dalton Trans.*, 49, 4100-4113. **Impact Factor = 4.052**

Cho, H.-J.; Sharma, A. K.; Zhang, Y.; Gross, M. L.; Mirica, L. M. **(2020)**, A Bifunctional Chelator as a Therapeutic Agent for the Attenuation of Amyloid Burden in Alzheimer's Disease, *ACS Chemical Neurosciences*, 11, 10, 1471-1481. **Impact Factor = 4.486**

Jain, S.; Bhar, K.; Bandyopadhyaya, S.; Singh, V. K.; Mandal, C. C.; Tapryal, S.; Sharma, A. K. (2020), Development, Evaluation and Effect of Anionic Co-ligand on the Biological Activity of Benzothiazole Derived Copper(II) Complexes, *Journal of Inorganic Biochemistry*, 11(10), 1471-1481. **Impact Factor = 3.348**

Chandrakanta Dash

Yadav,S.;Dash,C.(2020),One-pot tandem Heck alkynylation/cylization reactions catalyzed by bis(pyrrolyl)pyridine-based palladium pincer complexes. *Tetrahedron*, 76, 131350. **Impact Factor** = **2.46**

M. Bhanuchandra

Panda, S.; Jat, R. S.; Fayaz, A.; Saha, J.; Thirumoorthi, R.; Roy, T. K.; Bhanuchandra, M. **(2020)**, Conjugated Small Organic Molecules: Synthesis and Characterization of 4-Arylpyrazoledecorated Dibenzothiophenes. *New. J. Chem.*, 44(62),8944-8951. **Impact Factor = 3.288**



Thirumoorthi R

Thirumoorthi, R.; Chandrasekhar, V. **(2019)**, –Fluorophore-tagged organotellurium andantimony assemblies. *Inorganica Chimica Acta*, 497, 119092. **Impact Factor= 2.304**

Dhanwant, K.; Chivers, T.; Bhanuchandra, M.; Thirumoorthi, R. **(2020)**, X-ray structures and photophysical properties of Tris(1-naphthyl)silicon(IV) derivatives. *Journal of Molecular Structure*, 1219, Doi: 10.1016/j.molstruc.2020.128650. **Impact Factor= 2.463**

Jony Saha

Saha, J.; Kumar, A.; Anjana, P. M.; Jakhad, V. (2020), Oxidised charcoal: an efficient support for NiFe layered double hydroxide to improve electrochemical oxygen evolution. *Chem. Commun.*, 56(62), 8770-8773. Impact Factor = 3.379

Ritesh Singh

Ansari, A. J.; Yadav, A.; Mukherjee, A.; Sathish, E.; Nagesh, K.; and Singh, R. (2020); Metal Free Amination of Congested and Functionalized Alkyl Bromide at Room Temperature. *Chem. Commun.*, 56, 4804. **Impact Factor** = 5.99

Hemant Joshi

Meena, N.; Sharma, S.; Bhatt, R. P.; Shinde, V. N.; Sunda, A. P.; Bhuvanesh, N.; Kumar, A.; Joshi, H. (2020), Selenium coordinated palladium (II) trans-dichloride molecular rotor as catalyst for site selective annulation of 2-arylimidazo [1,2-a] pyridines. Chemical Communications, 54, DOI:10.1039/DOCC03599H. Impact Factor = 6.164

Shinde, V. N.; Bhuvanesh, N.; Kumar, A.; Joshi, H. (2020), Design and Syntheses of Palladium Complexes of NNN/CNN Pincer Ligands: Catalyst for Cross Dehydrogenative Coupling Reaction of Heteroarenes. *Organometallics*, 39, 324-333. **Impact Factor = 3.804**

Bhatt,R. P.;Bhuvanesh,N.;Sharma,K. N.; Joshi,H.(2020), Palladium Complexes of Thio/Seleno-Ether containing *N*-Heterocyclic Carbene: Efficient and Reusable Catalyst for Regioselective C-H Bond Arylation. *Eur. J. Inorg. Chem.*, 2020, 532-540. **Impact Factor = 2.529**

Bhatt,R. P.;Sharma,A. K.; Himanshi.;Bhuvanesh,N.; Joshi,H.(2020), Palladium complexes of chalcogenoethanamine (S/Se) bidentate ligands: Applications in catalytic arylation of CH and OH bonds. *Polyhedron*, 185, 114597. Impact Factor = 2.343

Sharma, A. K.; Joshi, H.; and Singh, A. K. **(2020)**, Catalysis with magnetically retrievable and recyclable nanoparticles layered with Pd(0) of C-C/C-O coupling in water. RSC Adv., 10, 6452–6459. **Impact Factor** = **3.119**

Department of Commerce

Praveen Sahu

Sahu, P.; Khangarot, G.(2019), Agro-tourism: A Dimention of Sustainable Tourism Development in Rajasthan. *The Journal of Indian Managemnt and Strategy*, 24(4), 21-26, ISSN: 0973-9335.

Yadav, P.; Sahu, P. **(2020)**, Performance & Risk-Return Analysis of Mutual Fund Schemes: An Investment Approach. *Journal of Xidian University*, 14(7), 1558-1569. ISSN: 1001-2400.





Yadav, P.; Sahu, P. **(2020)**, Evaluating Performance of Selected Diversified Equity Schemes for Indian Mutual Fund Industry. *Journal of Xidian University*, 14(6), 3250-3258. ISSN: 1001-2400.

Neha Seth

Seth, N.; Sidhu, A. **(2019)**, Price Discovery and Volatility Spillovers in Commodity Market: Review of Empirical Literature, International Journal of Financial Markets and Derivatives. *Inderscience Publishers*, ISSN: 1756-7130.

Ruchita Verma

Verma, R.; Sharma, D.**(2020)**, Do Announcement of Frauds Affect Movement of Stock Price? Evidence from Indian Banking Sector. *The Indian Journal of Commerce*, 73(1&2), 125-140. ISSN: 0019-512X. UGC-CARE LIST.

Sharma, D.; Verma, R.; Sam, S. **(2020)**, Effect of Demonetisation on Cashless Transactions in India. *Shodh Sarita*, 7(25), 58-67. ISSN: 2348-2397. UGC-CARE LIST.

Sushila Soriya

Soriya, S.; Kadian, P.**(2020)**, Intellectual Capital and Financial Performance of Indian Banking Sector. *Shodh Sarita*, 7(25), 17-23. ISSN: 2348-2397. UGC-CARE LIST.

Meena, A.K.; Soriya, S. **(2020)**, Structural Reviews of Initial public offerings: A Path Ahead. *Journal of Commerce & Accounting Research*, 9(3), 1-24. ISSN: 2277-2146.

Sanjay Kumar Patel

Kumari, P.; Patel, S. K. **(2020)**, Carbon Accounting: A Theoretical Perspective Towards Sustainability. *Shodh Sanchar Bulletin*, 10(38), 194-199. ISSN: 2229-3620. UGC-CARE LIST

Patel, S. K.; Kumari, P. **(2020)**, Indian Stock Market Movements and Responsiveness of Sustainability Indices: A Risk Adjusted Analysis. *International Management Review*, 16(1), 55-64. ISSN:1551-6849. UGC-CARELIST

Department of Computer Science

Mamta Rani

Verma, D. K.; Rani, M.; Tyagi, R. K.; Sagar, B. B. (2019), Baptista chaotic cryptosystem based on alternate superior dynamic lookup table. *Journal of Discrete Mathematical Sciences and Cryptography*, 22(8), 1383–1392.

Yadav, A.; Rani, M.; Verma, V. K.; Mundra. A. **(2020)**, A Review on Controlling of Julia and Mandelbrot Sets. *International Journal of Advanced Science and Technology*, 28(12), 213-223.

Joshi, M. C.; Rani, M.; Chandra. N. **(2020)**, Transcendental Picard Mann hybrid Julia and Mandelbrot sets. *Mathematica Moravica*, 23(1), 41–49.

Nishtha Kesswani

Jain, S. K.; Kesswani, N. **(2020)**, A Comparative study of Location privacy preservation in the Internet of Things. *Procedia Computer Science* 171, 1760-1769. **Impact Factor** = **1.26**



Devi, U.; Kesswani, N.; and Sharma, A. **(2020)**, A Diverse View on Feature-Oriented Programming in Software Product Line. *Studies in Indian Place Names*, 40(18), 1950-1957.

Jyotiyana, M.; Kesswani, N. **(2020)**, Classification and Prediction of Alzheimer's Disease using Multi-Layer Perceptron. *International Journal of Reasoning-based Intelligent Systems*.

Choudhary, S.; Kesswani, N.(2020), Analysis of KDD-Cup'99, NSL-KDD and UNSW-NB15 Datasets using Deep Learning in IoT. *Procedia Computer Science*, 167,1561-1573. **Impact Factor = 1.26.**

Kesswani, N.; Agrawal, B. (2020), SmartGuard: An Intrusion Detection system for Smart homes. *International Journal of Intelligent Information and Database Systems, Inderscience*, 13(1).

Jain, S. K.; Kesswani, N.(2020), IoTP: An Efficient Privacy Preserving scheme for Internet of Things Environment. *International Journal of Information Security and Privacy*, 14(2).

Jain, S. K.; Kesswani, N. (2020), Security, Privacy and Trust (SPT): Privacy Preserving Model for Internet of Things. *International Journal of Intelligent Information and Database Systems, Inderscience*.

Devi, U., Kesswani, N.; Sharma, A. **(2019)**, An Efficient model for measuring maintainability from code cloning and refactoring using regression. *International Journal of Scientific & Technology Research*, 8(12), 4019-4023.

Verma, J.; and Kesswani, N.(2019), AMIGM: Animal Migration Inspired Group Mobility Model for Mobile Ad hoc Networks. *Scalable Computing: Practice and Experience*, 20(3), 577-590.

A. Nagaraju

Singh, A.; Nagaraju, A. (2020), Low latency and energy efficient routing-aware network coding-based data transmission in multi-hop and multi-sink WSN. Ad-Hoc Networks, Vol. 107, Impact Factor = 3.643. Singh, A.; Nagaraju, A. (2020), Heuristic-based Opportunistic Network Coding at Potential Relays in Multi-hop Wireless Networks. International Journal of Computers and Applications. Vol. 42. Impact Factor = 1.5.

Nath, R.; Nagaraju, A.; Sreevathsa, M. N. R. **(2020)**, Multi-Workflow Concurrent Scheduling in a Heterogeneous Computing Cluster. *Journal of Scientific Industrial Research*, Vol.79. **Impact Factor = 0.729**.

Gaurav Meena

Choudhary, R. R.; Jishnu, K. K.; Meena, G. (2020), Image DeHazing Using Deep Learning Techniques. *Procedia Computer Science*, 167,1110-1119. Impact Factor = 1.26.

Meena, G.; Sharma, D.; Mahrishi, M. **(2020)**, Traffic Prediction for Intelligent Transportation System using MachineLearning. 3rd International Conference on Emerging Technologies in Computer Engineering: Machine Learning and Internet of Things (ICETCE), India. pp. 145-148, doi:



10.1109/ICETCE48199.2020.9091**7**58.

Ravi Raj Choudhary

Choudhary, R. R.; Jisnu, K. K.; Meena, G. **(2020)**, Image DeHazing Using Deep Learning Techniques Ravi Raj Choudhary. *Procedia Computer Science*, 167, 1110-1119, ISSN 1877-0509.

Ajay Indian

Indian, A.; Bhatia, K.(2019),Offline Handwritten Hindi Numerals Recognition using Zernike Moments. *International Journal of Tomography and Simulation*, 32(2), 68–82.

Krishna Kumar Mohbey

Koolwal, V.; Mohbey, K.K. **(2020)**, A comprehensive survey on trajectory-based location prediction. *Iran Journal of Computer Science*, 3, 65–91.

Mohbey, K.K. **(2020)**, Multi-class approach for user behavior prediction using deep learning framework on twitter election dataset. *J. Data, Inf. and Manag.* 2, 1–14.

Koolwal, V., Kumar, S., Mohbey, K. K. **(2020)**, The Role of Blockchain Technology to Make Business Easier and Effective. *In Transforming Businesses with Bitcoin Mining and Blockchain Applications* (pp. 16-44). IGI Global.

Mohbey, K. K. **(2020)**, Employee's Attrition Prediction Using Machine Learning Approaches. *In Machine Learning and Deep Learning in Real-Time Applications* (pp. 121-128). IGI Global.

Department of Computer Science and Engineering

Gaurav Somani

Saharan,S.;Somani,G.;Gupta,G.;Verma,R.;Gaur,M. S.; and Buyya,R. **(2020)**, QuickDedup - E_cient Deduplication of VM Images.*Elsevier Journal of Parallel and Distributed Computing (JPDC)*,139, 18-31. **(CORE A*,Impact Factor = 2.296**

Manral,B.;Somani,G.;Choo,K. K. R.;Conti,M.;Gaur,M. S. **(2019)**, A Systematic Survey on Cloud Forensics Challenges, Solutions, and Future Directions.*ACM Computing Surveys*, 52 (6), 2019. (CORE A*,**Impact Factor = 7.990**

Gajrani,J.;Tripathi,M.;Laxmi,V.;Somani,G.;Zemmari,A.; and Gaur,M. S. (2020), Vulvet: Vetting of Vulnerabilities in Android Apps to Thwart Exploitation. *ACM Digital Threats: Research and Practice Journal*, 1, 2, Article 10 (July 2020), 25 pages. DOI:https://doi.org/10.1145/3376121

Muzzammil Hussain

Jain, U.; Hussain, M.; Kakarla.(2020), Simple, secure, and lightweight mechanism for mutual authentication of nodes in tiny wireless sensor networks. *International Journal of Communication Systems* (Wiley), 33, e4384. Impact Factor = 1.44

Jain, U.; Hussain, M. **(2020)**, Securing Wireless Sensors in Military Applications through Resilient Authentication Mechanism. *Procedia Computer Science*, 171, 719-728. (Scopus Indexed)



Hussain, M.; Mishra, U. S. Simplified Online Payment Mechanism for Micropayments in E-Commerce. *International Journal of Advanced Science and Technology*, 29(4), SERSC, 6263 – 6268. (Scopus Indexed).

Department of Data Science & Analytics Upasana Talukdar

Talukdar, U.; Hazarika, S. M.; Gan, J. Q. **(2020)**, Adaptation of Common Spatial Patterns basedon mental fatigue for motor-imagery BCI, *Biomedical Signal Processing and Control*, 58, 101829, doi:https://doi.org/10.1016/j.bspc.2019.101829. **Impact Factor = 3.2137**

Talukdar, U.; Hazarika, S. M.; Gan, J. Q. **(2020)**, Adaptive feature extraction in EEG-based motor imagery BCI: tracking mental fatigue, *Journal of Neural Engineering*, 17,016020, doi: https://doi.org/10.1088/1741-2552/ab53f1.**ImpactFactor = 4.141**

Vikas Kumar

Kagita, V. R.; Pujari, A. K.; Padmanabhan, V.; Kumar, V. **(2019)**, Skyline Recommendation with Uncertain Preferences, *Pattern Recognition Letters*, 125, 446 - 452, doi:https://doi.org/10.1016/j.patrec. 2019.06.002. **Impact Factor = 3.255**

Veeramachaneni, S. D.; Pujari, A. K.; Padmanabhan, V.; Kumar, V. (2019), A Maximum Margin Matrix Factorization based Transfer Learning Approach for Cross-Domain Recommendation, *AppliedSoft Computing*, 85, 105751, doi: https://doi.org/10.1016/j.asoc.2019.105751. Impact Factor = 5.472

Department of Economics Hemlata Manglani

Manglani, H.**(2020)**, An Econometric Analysis of India's Bilateral Trade with South Asian Countries: A Gravity Model Approach. *International Journal of Foreign Trade and International Business*, pp. 7-14 E-ISSN: 2663-3159, P-ISSN-2663-3140.

Manglani, H.; Kumari, L.; and Jha, D. **(2019)**, Gravity Model Analysis of India's Bilateral Trade with Special Reference to Selected SAARC Countries. *The IIS University Journal of Social Sciences*, 2018-19, 7 & 8 (1),106-113, ISSN 2319-2593.

Kumari, L. Manglani, H. **(2019)**, Construction of women empowerment index: an impact study of self-help group interventions in Jhajjar District of Haryana. *Indian Journal of Economics and Development*, 7(7), ISSN (online): 2320-9836 ISSN (Print): 2320-9828.

Department of Education Aniali Sharma

Anjali Sharma

Sharma, A.; Singh, S. **(2020)**, Growth Mindset Pedagogy: A Magical Exercise in Classroom Setting. *Desh Vikas*, 6 (4), January – March 2020, ISSN 2394-1782 RNI: APENG/2014/57359.

School Climate: Government and Seventh-Day Adventist Schools in Ethiopia. *Journal of Research on Christian Education*, 28(2),2019. *Routledge, Taylor and Francis*, 178-192, DOI: 10.1080/10656219.2019.1631921



Narendra Kumar

Kumar, N.; Kumar, R. **(2019)**, Alienation among Hostlers and Day Scholars Studying at Undergraduate Level in Govt. and Pvt. Universities. *Asian Resonanace*, 8(1), 162-164.

Kumar, N.; Kumar, R. **(2019)**, Gandhi's Educational Philosophy and its Relevance in the Current Education System. *Rajagiri Journal of Social Development*, 11(2), 153-162.

Gobind Singh

Gera, M.; Gure, G. S. **(2019)**, Primary School Teachers' Competencies for Designing the Instructional Strategies Teaching on ADDIE Model. *Think India Journal*, 22(14), *ISSN*: 0971-1260.

Gure, G. S. **(2019)**, University Students' Future Career Options in Relation to Their Entrepreneurial Attitude and Attitude Towards Self-Employment. *Think India Journal*, 22(14), ISSN: 0971-1260.

Sangeet Yaduvanshi

Yaduvanshi,S.;Singh,S. **(2019)**, Fostering achievement of low, average and high achievers' students in biology through structured cooperative learning (STAD method). *Education Research International*, Volume 2019, Article ID 1462179, 2019; 1-10. ISSN: 2090-4010

Yaduvanshi, S. **(2020)**, Creating Cooperative learning Classroom through implementation of STAD method for Biology learning. *Accepted in School Science, NCERT*.

Rina Godara

Godara, R. **(2019)**, Integration of ICT in Economics: Available resources. *International Research Journal for Quality in Education*, 2, 18-24.

T Sangeetha

Sangeetha, T. **(2019)**, Influence of Mass Media on Learning among Adolescent Students. *An International Multidisciplinary Quarterly Research Journal: AJANTA* (UGC Approved No: 40776), 8(1), 201.

Sangeetha, T. **(2020)**, Inclusive Education for Children with ADHD through Intervention Strategies. *PurakalaJournal*, 31(28), ISSN 0971-2143 (UGC Care Listed).

Seema Gopinath

Gopinath, S. **(2020)**, Awareness of Skills in Teaching and Attitude towards Teaching of Student Teachers at Secondary Level. *Purakala Journal*, 31(4), ISSN 0971-2143.

Department of English

Sanjay Arora

Arora, S.**(2019)**, MOOCx in ELT: A Passing Fad or Platform for Massive Long-Term Gains. *Language Forum (A Journal of Language & Literature)*. 45(2), 48-60.

Bhumika Sharma

Sharma, B. **(2019)**, The Silent Avowal of Nature in Kiran Desai's The Inheritance of Loss. *Liitcrit*, 45(1), 30-40.



Sharma, B.; Singh, A. (2020), Revisiting the Ramayana: Engagements with Liminality. *Literary Voice*, 12(1), 186-197.

Sharma, B.; Kumar, R. (2020), Convalescent Rajasthani Folk Traditions: Re-invigorating the Musical Legacy of Manganiyars and Langas. Shodh Sanchar Bulletin, 10(38), 25-32.

Kumar, R.; & Sharma, B. **(2020)**, Conceptualizing Afterlife: The Poetics of 'Posthumous' in Kabir's Poetry. *Shodh Sarita*, 7(26) (II), 47-51.

Neha Arora

Arora, N.; Merin, J. (2019), Popular Culture and Animal Symbolism: An Insight into Caste-Based Films with Special Reference to Pariyerum Perumal. *Literary Voice*, 1(11), 111-116.

Arora, N. **(2019)**, Instruments of Subjugating Women in Dalit Patriarchy: A Comparative Reading of Limbale's. Akkarmashi and Kale's Against All Odds, GNOSIS, 5(4), 32-40.

Arora, N. (2019), Going Back to the 'Roots' in Search of One's Identity. *Impressions*, XIII(II), 1-12.

Devendra Rankawat

Rankawat, D. (2019), Truth and Literature: A Conceptual Inquiry. JETIR, 6(3), 764-69.

Ved Prakash

Prakash, V.(2019), Making Films, Breaking Stereotypes: Questioning Vulnerability through Village Rockstars (2017). *Journal of Literature and Cultural Studies, Mizoram University*, VI(II), 124-135.

Department of Environmental ScienceRajesh Kumar

Gourav, P.; Kumar, R.; Gupta, A. **(2020)**, AHP based Flood Hazard Zonation and Risk Assessment in the Bhagirathi River Basin, India. *Disaster Advances*, 13(3), 1-16.

Singh, R.; Kumar, R.; Bahuguna, I.M.; Kumar, R. (2020), Grain Size Analysis of Dune and Bar Sediments of the Shyok River between Khalsar and Hunder Village, Karakoram Range, Ladakh, India. *Journal Geological Society of India*, 95,183-189. **Impact Factor = 0.899**

Gourav, P.; Kumar, R.; Gupta, A.; Mohammad, A. **(2020)**, Flood Hazard Zonation of Bhagirathi River Basin using Multi-Criteria Decision-Analysis in Uttarakhand, India. *International Journal on Emerging Technologies*, 11(1), 62-71.

Kumar, R.; Bahuguna, I.M.; Ali, S.N.; Singh, R. (2019), Lake Inventory and Evolution of Glacial Lakes in the Nubra-Shyok Basin of Karakoram Range. Earth Syst Environ, 4, 57-70. https://doi.org/10.1007/s41748-019-00129-6

Kumar, R.; Kumar, R.; Singh, S.; Singh, A.; Bhardwaj, A.; Chaudhary, H. **(2019)**, Hydro-geochemical characteristics of glacial meltwater from Naradu Glacier catchment, Western Himalaya. *Environ Earth Sci*,78,683. https://doi.org/10.1007/s12665-019-8687-0. Impact Factor = 2.253

Mohammad, A.; Kumar, R.; Kumar, R.; Zusman, E. (2019), Modelling of sectoral emissions of short-lived





and long-lived climate pollutants under various control technological strategies. *Science of the Total Environment*, 699 (2020), 134358, https://doi.org/10.1016/j.scitotenv.2019.134358. Impact Factor = 6.551

L.K. Sharma

Sharma, L.K.; Verma, R. **(2020)**, AVIRIS-NG Hyperspectral Data Analysis for Pre and Post MNF Transformation using Per-pixel Classification Algorithms. *Geocarto International*, DOI: 10.1080/10106049.2020.1801857 (Published Online). **Impact Factor = 3.76**

Gupta, R.; Sharma, L.K. **(2020)**, Efficacy of Spatial Land Change Modeler as a forecasting indicator for anthropogenic change dynamics over five decades: A case study of Shoolpaneshwar Wildlife Sanctuary, Gujarat, India. *Ecological Indicators*. 112:106171. DOI: 10.1016/j.ecolind.2020.106171. **Impact Factor** = **4.22**

Sinha, S.; Mohan, S.; Das, A.K.; Sharma, L.K.; Jeganathan, C.; Santra, A.; Mitra, S. S.; Nathawat, M.S. **(2020)**, Multi-sensor approach integrating optical and multi-frequency synthetic aperture radar for carbon stock estimation over a tropical deciduous forest in India. *Carbon Management*. **11**(1):39-55. **Impact Factor = 1.46**

Dash, J.; Behera, M. D.; Jeganathan, C.; Jha, C. S.; Sharma, S.; Lucas, R.; Khuroo, A. A.; Harris, A.; Atkinson, P. M.; Boyd, D. S.; Singh, C. P.; Kale, M. P.; Kumar, P.; Behera, S. K.; Chitale, V. S.; Jayakumar, S.; Sharma, L.K.; Pandey, A. C.; Avishek, K.; Pandey, P. C.; Mohapatra, S. N.; Varshney, S. K. (2020), India's contribution to mitigating the impacts of climate change through vegetation management. *Tropical Ecology*. 61: 168–171. Impact Factor = 0.65

Sinha, S.; Abhisek, S.; Das, A.K.; Sharma, L.K.; Mohan, S.; Nathawat, M.S.; Mitra, S. S.; Jeganathan, C. **(2019)**, Regression-Based Integrated Bi-Sensor SAR Data Model to Estimate Forest Carbon Stock. *Journal of the Indian Society of Remote Sensing*, **47**(9), 1599-1608. DOI:10.1186/s13717-019-0193-5. **Impact Factor = 0.99**

Sinha, S.; Abhisek, S.; Das, A.K.; Sharma, L.K.; Mohan, S.; Nathawat, M.S.; Mitra, S. S.; and Jeganathan, C. **(2019)**, Accounting tropical forest carbon stock with synergistic use of space-borne ALOS PALSAR and COSMO-Skymed SAR sensors. *Tropical Ecology*, 60, 83–93. DOI: 10.1007/s42965-019-00011-6. **Impact Factor = 0.65**

Gupta, R.; Sharma, L.K., **(2019)**,The process based forest growth model 3-PG for use in forest management: A review. *Ecological Modelling*, 397, 55-74. **Impact Factor = 2.49**

Sharma, G.; Sharma, L. K.; Sharma, K. C. **(2019)**, Assessment of land use change and its effect on soil carbon stock using multitemporal satellite data in semiarid region of Rajasthan, India. *Ecological Process*, 8(42), 10-17. **Impact Factor = 1.64**

Garima Kaushik

Sharma, K.; Kaushik, G.; Thotakura, N.; Raza, K.; Sharma, N.; Nimesh, S.**(2019).** Enhancement effects of process optimization technique while elucidating the degradation pathways of drugs present in pharmaceutical industry wastewater using Micrococcus yunnanensis. *Chemosphere*, 124689.**Impact Factor = 5.108**



Ritu Singh

Rajput, V.; Minkina, T.; Ahmed, B.; Sushkova, S.; Singh, R.; Soldatov, M.; Musarrat, J. (2019). Interaction of Copper-Based Nanoparticles to Soil, Terrestrial, and Aquatic Systems: Critical Review of the State of the Science and Future Perspectives. *Rev Environ Cont Toxicol.*, 252, 51-96. **Impact Factor = 5.767**

Department of Hindi

N. Lakshmi Aiyar

Aiyar, N. L. **(2019)**, Patriotism, woman in the works of subrahmanya bharati and suryakant tripathi nirala. *Heterogeneous perspectives in Tamil language & literature*, III, 1308-1325.

Aiyar, N. L. **(2019)**, Rashtra kavi subrahmanya bharati ki rachanoom mein gandhivaad. *Kendriy Hindi sansthan, Agra Gaveshana*, 221-225.

Aiyar, N. L. **(2019)**, Relevance of Bhagavad Gita to the postmodern era. *IJELC online journal*, 7(7), 214-219.

Aiyar, N. L. **(2019)**, Dakshn bharatiya sahitya mein swatantrata aandolan: Dakshin ke swatantrata sangram ke unnayak: Tamil telugu pradeshon ke sandarbh mein. *Akhila bharatiya sahitya parishad, New Delhi*, 38-42.

Aiyar, N. L. **(2019),** Gandhiwaad: Subrahmanya Bharathi evan Rama lingam pillai ke Vishesh Sandarbh. *Bahu vachan: ank:63 Intenational Hindi university Magaine Wardha,* 107-112.

Aiyar, N. L. **(2019),** Dr.Sarvepalli Radha Krishnan: Shikshan-adhigam-prakriya. *Bharathiya Shiksha Shastri Shrunkhla-5:Kendriya Hindi sansthan, Agra,* 72-77.

Aiyar, N. L. **(2019),** Hindi- Tamil Adhyeta -Kosh (Hindi-Tamil Learners Dictionary). *Kendriya Hindi sansthan, Agra.*

Aiyar, N. L. **(2019)**, Jayadevar Asthapadi. A m*isimi issue*, (ISSN2454-4329).

Aiyar, N. L. **(2019),** Jodhpur paryatan Kendra in Telugu. A m*isimi issue,* (ISSN2454-4329).

Mamata Khandal

Khandal, M. (2019), Pitaek mukabhiwyakti: Sahityik sandarbh. Printing Area, 01, 149-154, 2394-5303.

Khandal, M. **(2019),** Hindi ki yatra-Sanskriti ki vikas yatra. *Vidhya Varta*, 4, 113-116, 2319-9318.

Khandal, M. **(2019)**, Satthotari Hindi natakon mein chitrit nari chetna. *Shodh Sandarsh*, Vll, 1-3, 2319-5908.

Khandal, M. **(2020)**, Hindi upanyason mein deh wyapar. *Madhumati*, 60, 48-58, 2321-5569.

Khandal, M. **(2020)**, Bazarwad aur ikkishwin sadi ki kavita. *Shodh Sanchar Bulletin*, 10,192-195, 2229-3620.



Khandal, M. (2020), Mukt chhand ke kavi Nirala. *Shodh Sarita*, 7, 238-242, 2348-2397.

Suresh Singh Rathore

Rathore, S. S. (2019), Rajasthan ka 21 vin sadi ka Hindi mahila kahani lekhan aur Stri Jiwan. *Samvet*, 7(13), 98-105.

Sandeep V. Ranbhirker

Ranbhirker, S. V. **(2019)**, 21 vi sadi ka Hindi upanyas lekhan aur mahanagariy bodh. *Bhasha*, 58, 18-23, 0523-1418.

Ranbhirker, S. V. (2020), Meera ke kavya me adhyatm banam samajikta. *Meerayan*, 13, 16-22, 2455-6033.

Department of ManagementMaithili R.P. Singh

Singh, M.R.P.; Kishor, J. **(2019)**, Doctors and Administrative Staffs' Perception towards Healthcare Services of Specialty Hospitals in Rajasthan. *BHU Management Review*, **07**(01),39-46, ISSN: 22310142.

Uma Sankar Mishra

Pattnaik, S.; Mishra, U. S.**(2020),** Impact of perceived public relation on customer loyalty with moderating role of brand image. *TEST Journal of Engineering and Management*, 82, 1799-1806.

Mohapatra, S. K.; and Mishra, U. S.(2020), Designing a model for consumer strategies for adoption of performance analysis of 4G mobile services. *International Journal of Advanced Science and Technology*, 29(8),991-998.

Sanjay Kumar

Gupta, S.; Kumar, S. **(2019)**, The Determinants of Reverse Mortgage Choice of Indian Elderly Homeowners for Sustainable Livelihood: A Logit Analysis. *Humanities & Social Sciences Reviews*. **7**(4), 309-317.

Gupta, S.; Kumar, S. **(2019)**, Economic Factors Influencing Indian Older Homeowners' Decision to Opt for Reverse Mortgage: An Empirical Investigation. *The IUP Journal of Management Research*, 18(3), 25-38.

Avantika Singh

Nigam, S.; Singh, A.; Singh, V. **(2019),** Engendering Evidence-Based Policy for Young People's Reproductive Health in India. *USAID and MEASURE Evaluation Working Paper*. University of North Carolina at Chapel Hill.

Tulsee Giri Goswami

Goswami, T. G.; Ranjan, S.**(2019)**, Psychological Contract Breach and Workplace Outcome: Effective Relationship Among Employee and Organization. *Think India Journal* (UGC Group-D) ISSN: 0971-1260, 22(15), 317-344.

Department of Mathematics

D.C.Sharma

Deora, P.; Sharma, D. C.; Jharotia, P.(2020), Cost analysis of degraded machining system with spare,



common cause failure and operating under variable service rate. *Jordan Journal of Mathematics and Statistics*, 13(2), 265 – 281.

Jugal K. Prajapat

Prajapat, J. K.; Manivannan, M.; Maharana, S. **(2020)**, Harmonic mappings with analytic part convex in one direction. *The Journal of analysis* (in press), DOI: 10.1007/s41478-020-00226-0.

Rajbala.; Prajapat, J. K. **(2020)**, On a subclass of close-to-convex harmonic mappings. *Asian European Journal of Mathematics* (in press), DOI: 10.1142/S1793557121501023.

Rajbala.; Prajapat, J. K. **(2020)**, Hardy spaces of certain convolution operator. *Kyungpook Mathematical Journal*, 60(1), 127-132.

Prajapat, J. K.; Rajbala. **(2019)**, Bounds on coefficients and third Hankel determinants for a class of analytic functions related with certain conic domain. *Journal of Classical Analysis*, 15(2), 61-69.

Anand Kumar

Vanita.; Kumar, A. **(2019)**, Study of magnetohydrodynamics convection between two rotating cylinder filled with Casson fluid and viscous dissipation effect. *Heat Transfer*, 48, 1204-1224.

Dwivedi, N.; Singh, A. K.; Kumar, A. (2019), Natural convection between vertical wall due to point/line heat source/sink. *International Journal and Computational Mathematics*, 5, 75.

Amit Chakraborty

Li, T.; Ce, W. C.; Xu, Z.; Chakraborty, A. **(2020)**, A coupled method of on-line solid phase extraction with the UHPLC-MS-MS for detection of sulfonamides antibiotics residues in aquaculture. *Chemospehere (in press)* doi.org/10.1016/j.chemosphere.2020.126765.

Rashid, M.; Bera, S.; Banerjee, M.; Medvinsky, A.; Sun, G. Q.; Li, B.-L.; Slijoka, A.; Chakraborty, A. (2020), Feedforward regulation of plant nitrate transporter NRT1.1 biphasic adaptive activity. *Biophysical Journal* (cell press), 118, 898-908.

Vidyottama Jain

Jain, V.; Raj, R.; Dharmaraja, S. Numerical optimization of loss system with retrialphenomenon in cellular networks. *International Journal of Operational Research* (in press).

Srinivasan, R.; Jain, V.; Dharmaraja, S. **(2020)**, Perception Based Performance Analysis of Higher Education Institutions: A Soft Computing Approach, *Soft Computing*.

Dharmaraja S.; Narang, S.; Jain, V. (2020), A Mathematical Model for Supply ChainManagement of Blood Banks in India. *Opsearch*.

Dharmaraja, S.; Jain, V.; Anjoy, P.; Chandra, H. (2020), Empirical Analysis for Crop Yield Forecasting in India. *Agricultural Research*.

Ram Kishor

Kishor, R.; Xavier, M.; Raj, J.; Ishwar, B. (2019), Normalization of Hamiltonian and nonlinear stability of



triangular equilibrium points in the photogravitational restricted three body problem with P-R drag in non-resonance case, *Qualitative Theory of Dynamical Systems*.

Yousuf, S.; Kishor, R. **(2019)**, Effects of the albedo and disc on the zero velocity curves and linear stability of equilibrium points in the generalized restricted three-body problem. *Monthly Notices of the Royal Astronomical Society (Oxford University Press)*, 488(2), 1894-1907. **Impact Factor = 5.356**

Jai Prakash Tripathi

Tiwari,V.; Tripathi, J. P.; Abbas, S.; Wang, J.-S.; Sun, G.-Q.; Jin, Z. **(2019)**, Qualitative analysis of a diffusive Crowley–Martin predator–prey model: the role of nonlinear predator harvesting. *Nonlinear Dynamics*, 98, 1169-1189.

Zhang, Z.; Kundu, S.; Tripathi, J. P.; Bugalia, S. **(2020)**, Stability and Hopf bifurcation analysis of an SVEIR epidemic model with vaccination and multiple time delays. *Chaos, Solitons and Fractals*, 131, 109483. Srivastva, H.M.; Day, U.; Ghosh, A.; Tripathi, J. P.; Abbas, S.; Taraphder, A.; Roy, M. **(2020)**, Growth of tumor due to Arsenic and its mitigation by black tea in Swiss albino mice. *Alexandria Engineering Journal*, 59, 1345-1357.

Tiwari, V.; Tripathi, J. P.; Mishra, S.; Upadhyay, R.K. (2020), Modeling the fear effect and stability of non-equilibrium patterns in mutually interfering predator–prey systems. *Applied Mathematics and Computation*, 371, 124948.

Tiwari, V.; Tripathi, J. P.; Jana, D.; Tiwari, S.; Upadhyay, R.K. **(2020)**, Exploring Complex Dynamics of Spatial Predator–Prey System: Role of Predator Interference and Additional Food. *International Journal of Bifurcation and Chaos*, 30(7), 205102.

Vipul Kakkar

Pandey, M. S.; Upadhyay, S. K.; Kakkar, V. **(2020)**, A Construction of Bent Functions on a Finite Group.*National Academy Science Letters*.

Kakkar, V.; Lal, R.; Yadav, A. C.(2020), Generalized right near domains and sharply 2-transitive groups. *Journal of Algebra and Its Applications*.

Asha Kumari Meena

Praveen, C.; Nkonga, B.; Meena, A. K.; Bhole, A. (2020), A path conservative finite volume method for a shear shallow water model. *Journal of Computational Physics*.

Department of Microbiology

Pradeep Verma

Kumar, B.; Verma, P. **(2020)**, Enzyme mediated multi-product process: A concept of bio-based refinery. *Industrial Crops and Products*, 154(2020), 112607. **Impact Factor = 4.244**

Agrawal, K.; Verma, P. **(2020)**, Multicopper Oxidase Laccases with Distinguished Spectral Properties: A New Outlook. *Heliyon (Cell Press)*, 6(5), E03972.

Kumar, B.; Bhardwaj, N.; and Verma, P. (2020), Microwave assisted transition metal salt and



orthophosphoric acid pretreatment systems: Generation of bioethanol and xylooligosaccharides. Renewable Energy, 158, 574-584. Impact Factor = 6.274

Bhardwaj, N.; Kumar, B.; Agrawal, K.; Verma, P. **(2020)**, Bioconversion of rice straw by synergistic effect of in-house produced ligno-hemicellulolytic enzymes for enhanced bioethanol production. *Bioresource Technology Reports*, 10, 100352.

Bhardwaj, N.; Kumar, B.; Verma, P.**(2020)**, Microwave-assisted pretreatment using alkali metal salt in combination with orthophosphoric acid for generation of enhanced sugar and bioethanol. *Biomass Conversion and Biorefinery*, doi.org/10.1007/s13399-020-00640-1. **Impact Factor = 2.602**

Bhardwaj, N.; Verma, V.; Chaturvedi, V.; Verma, P.(2020), Cloning, expression and characterization of a thermo-alkali-stable xylanase from Aspergillus oryzae LC1 in Escherichia coli BL21 (DE3), Protein Expression and Purification, 168, 105551.Impact Factor = 1.513

Agrawal, K.; Verma, P. (2020), Potential removal of hazardous wastes using white laccase purified by ATPS-PEG-salt system: An operational study. *Environmental Technology & Innovation*, 17, 100556. Impact Factor = 3.356

Kumar, B.; Bhardwaj, N.; Agrawal, K.; Chaturvedi, V.; Verma, P. **(2020)**, Current perspective on pretreatment technologies using lignocellulosic biomass: an emerging biorefinery concept. *Fuel Processing Technology*, 199, 106244. **Impact Factor = 4.982**

Agrawal, K.; Verma, P. **(2019)**, Column bioreactor of immobilized Stropharia sp. ITCC 8422 on natural biomass support of L. cylindrica for biodegradation of anthraquinone violet R. *Bioresources Technology Reports*, 8,100345.

Bhardwajn, N.; Kumar, B.; Verma, P. **(2019)**, A detailed overview of xylanases: An emerging biomolecule for current and future prospective. *Bioresources and Bioprocessing*, 6, 40.

Agrawal, K.; Verma, P. **(2019)**, Laccase: addressing the ambivalence associated with the calculation of enzyme activity. *3Biotech*, 9(365), doi.org/10.1007/s13205-019-1895-1. **Impact Factor = 1.798**

Agrawal, K.; Verma, P. **(2019)**, Biodegradation of synthetic dye Alizarin Cyanine Green by yellow laccase producing strain Stropharia sp. ITCC-8422. *Biocatalysis and Agricultural Biotechnology*, 21(2019), 101291.

Kumar, B.; Bhardwaj, N.; Verma, P. **(2019)**, Pretreatment of rice straw using microwave assisted FeCl₃-H₃PO₄ system for ethanol and oligosaccharides generation. *Bioresources Technology Reports*, 7(2019), 100295.

Akhil Agrawal

Sandeep, R.; Jain, S.; Agrawal, A. **(2020)**, Oil reservoir simulating bioreactors: tools for understanding petroleum microbiology. *Applied microbiology and biotechnology*, 104 (3), 1035-1053. **Impact Factor = 3.8**



Arvind P. Singh

Saharan, V. V.; Verma, P.; Singh, A. P. **(2020)**, High prevalence of antimicrobial resistance in E. coli, Salmonella spp. and S. aureus isolated from Fish samples in India. *Aquaculture Research*, 10.1111/are.14471, **Impact Factor = 1.34**

Saharan, V. V.; Verma, P.; Singh, A. P. **(2020)**, Escherichia coli, Salmonella spp., and Staphylococcus aureus susceptibility to antimicrobials of human and veterinary importance in poultry sector of India. *Journal of Food Safety*, 10.1111/jfs.12742. **Impact Factor = 1.66**

Hemlata, Meena, P. R.; Singh, A. P.; Tejavath, K. K. **(2020)**, Biosynthesis of Silver Nanoparticles Using Cucumis prophetarum Aqueous Leaf Extract and Their Antibacterial and Antiproliferative Activity Against Cancer Cell Lines. *ACS omega*, doi: 10.1021/acsomega.0c00155. **Impact Factor = 2.58**

Nidhi Pareek

Dash, S.; Kumar, M.; Pareek, N. **(2020)**, Enhanced antibacterial action of berberine via synergism with chitosan nanoparticles. *Materials Today: Proceedings*, https://doi.org/10.1016/j.matpr.2020.05.506.

Paritosh, K.; Yadav, M.; Chawade, A.; Sahoo, D. N.; Kesharwani, N.; Pareek, N.; Vivekanand, V. (2020), Additives as a Support Structure for Specific Biochemical Activity Boosts in Anaerobic Digestion: A Review. Frontiers in Energy Research, 8, 88. Impact Factor = 2.75

Gandhi, P.; Yadav, M.; Paritosh, K.; Pareek, N.; Lizasoain, J.; Bauer, A.; Vivekanand, V. **(2020)**, Food wastes from hospitality sector as versatile bioresources for bio-products: an overview. *Journal of Material Cycles and waste Management*, 22, 955-964. **Impact Factor = 2.19**

Kumar, M.; Dangayach, P.; Pareek, N. **(2020)**, Enhanced glucosamine production through synergistic action of Aspergillus terreus chitozymes. *Journal of Cleaner Production*, 262, 121363. **Impact Factor = 7.49**

Brar, A.; Kumar, M.; Singh, R. P.; Pareek, N.; Vivekanand, V. **(2020)**, Phycoremediation coupled biomethane production employing sewage wastewater: Energy balance and feasibility analysis. *Bioresource Technology*, 308, 123292. **Impact Factor = 7.54**

Stephen, B. J.; Pareek, N.; Saeed, M.; Kausar, M. A.; Rahman, S.; Datta, M. **(2020)**, Xeno-miRNA in maternal-infant immune crosstalk: an aid to disease alleviation. *Frontiers in Immunology*, **11**, 404. **Impact Factor** = **5.08**

Kumar, M.; Rajput, M.; Soni, T.; Vivekanand, V.; Pareek, N. (2020), Chemoenzymatic production and engineering of chitooligosaccharides and N-acetyl glucosamine for refining biological activities. *Frontiers in Chemistry*, 8, 469. **Impact Factor = 3.69**

Paritosh, K.; Pareek, N.; Chawade, A.; Vivekanand, V. **(2019)**, Prioritization of solid concentration and temperature for solid state anaerobic digestion of pearl millet straw employing multi-criteria assessment tool. *Scientific Reports*, 9, 11902. **Impact Factor = 4.57**

Vijay K. Verma

Ojha, R.; Gupta, N.; Naik, B.; Singh, S.; Verma, V. K.; Prusty, D.; Prajapati, V. K. (2020), High throughput and



comprehensive approach to develop multiepitope vaccine against minacious COVID-19. Eur J Pharm Sci. 151(2020) 105375. Impact Factor = 3.61

Gupta, N.; Regar, H.; Verma, V. K.; Prusty, D.; Mishra, A.; Prajapati, V. K. **(2020)**, Receptor-ligand based molecular interaction to discover adjuvant for immune cell TLRs to develop next-generation vaccine. *Int J Biol Macromol*, 152, 535-545. **Impact Factor = 5.1**

Sharma, B.; Agarwal, M.; Verma, V. K.; Dhar, S. K. **(2020)**, DNA, DNA replication and aging.InProf. P. C. Rath (Editor), Models, Molecules and Mechanisms in Biogerontology.*Springer Nature Singapore Pte Ltd.* ISBN 978-981-329-005-1, Page 27-42. (1st ed. 2020, XIII, 497 p. 77 illus., 70). Impact Factor = NA

Bhardwaj, N.; Verma, V. K.; Chaturvedi, V.; Verma, P.(2019), Cloning, expression and characterization of a thermo-alkali-stable xylanase from Aspergillus oryzae LC1 in Escherichia coli BL21 (DE3). Protein Expr Purif., 12(168), 105551. Impact Factor = 1.38

Kumar, A.; Saha, S.; Verma, V.; Dhar, S. K. **(2019)**, Helicobacter pylori helicase loader protein Hp0897 shows unique functions of N- and C-terminal regions.Biochem J., 476(21), 3261-3279.**Impact Factor =4.33**

Gupta, N.; Khatoon, N.; Verma, V. K.; Prajapati, V. K. (2019), Structural vaccinology approach to investigate the virulent and secretory proteins of Bacillus anthracis for devising Anthrax next-generation vaccine. *J Biomol Struct Dyn.*, Doi 10.1080/07391102.2019.1688197. Impact Factor = 3.3

Chandra Sekhar Gahan

Garg, H.; Nagar, N.; Ellamparuthy, G.; Angadi, S. I.; Gahan, C. S. **(2019)**, Bench scale microbial catalysed leaching of mobile phone PCBs with an increasing pulp density. *Heliyon*, 5(12), 1-11.

Garg, H.; Nagar, N.; Ansari, M. N.; Ellamparuthy, G.; Angadi, S. I.; Akcil, A.; Gahan, C. S. **(2020)**, Bioleaching of waste mobile phone printed circuit board in controlled redox potential compared to non-controlled redox potential. *International Journal of Environmental Science and Technology*, **17**, 3165-3176.

Nagar, N.; Garg, H.; Gahan, C. S. **(2019)**, Integrated Bio-Pyro-Hydro-Metallurgical approach to recover metal values from petroleum refinery spent catalyst. *Biocatalysis and Agricultural Biotechnology*, 20, 101252.

Garg, H.; Nagar, N.; Sharma, P.; Kamwar, J.; Zaki, S.; Gahan, C. S. **(2019)**, Effect of Increasing Concentrations of Chloride, Nitrate and Sulphate Anions with Their Counter Cations of Potassium, Sodium and Ammonium on Sulphur Bio-Oxidation by Sulphur Oxidizing Microorganisms. *Archives of Petroleum and Environmental Biotechnology*, **6(1) 147**.

Garg, H.; Nagar, N.; Dash, A.; Gahan, C. S. **(2019)**, Efficiency assessment of pure Fe oxidizing microorganisms in iron supplemented and non-supplemented medium and pure S oxidizing microorganisms for bioleaching of mobile phone printed circuit boards, Bioscience Biotechnology Research Communications. *Official journal of society for Science & Nature*, 12(2), 425-434.

Nagar, N.; Garg, H.; Angadi, S. I.; Gahan, C. S. **(2019)**, Influence of grinding time on bioleaching of copper from copper slag. Bioscience Biotechnology Research Communications. *Official journal of society for Science & Nature*, 12(2), 512-522.



Garg, H.; Nagar, N.; Behera, S.; Gahan, C. S. **(2019)**, Comparative batch and fed-batch bioleaching of zinc from zinc sulphide concentrate using mixed culture of iron and sulphur oxidizing microorganisms. *NPI International Research Journal of Industrial and Environmental Biotechnology*, *NPI Publishers*, ,2(1), 177-221.

Deekhsa Tripathi

Tripathi, D.; Kant, S.; Pandey, S.; Ehtesham, N. Z. **(2020)**, Resistin in Metabolism, Inflammation and Diseases. *The FEBS Journal*, 2020. **Impact Factor = 4.7**

Pandey, S.; Yadav, B.; Pandey, A.; Tripathi, T.; Khawary, M.; Kant, S.; Tripathi, D. **(2020)**, Lessons from SARS-CoV-2 Pandemic: Evolution. *Disease Dynamics and Future Biology*. **Impact Factor = 3.79**

Department of Pharmacy Amit Kumar Goyal

Kaur, P.; Mishra, V.; Shunmugaperumal, T.; Goyal, A. K.; Ghosh, G.; Rath, G. **(2020)**, Inhalable spray dried lipidnanoparticles for the co-delivery of paclitaxel and doxorubicin in lung cancer. *Journal of Drug Delivery Science and*

Technology, https://doi.org/10.1016/j.jddst.2020.10150256, 101502. **Impact Factor = 2.26**

Misra, C.; Raza, K.; Goyal, A. K. (2020), The Scope and Challenges of Vesicular Carrier-Mediated Delivery of Docetaxel for the Management of Cancer. *Current Drug Delivery*.

https://doi.org/10.2174/1567201817666200623121633. **Impact Factor = 1.58**

Kaur, V.; Goyal, A. K.; Ghosh, G.; Si, S. C.; Rath, G. (2020), Development and characterization of pellets for targeted delivery of 5-fluorouracil and phytic acid for treatment of colon cancer in Wistar rat. Heliyon, 6(1), p.e03125.ImpactFactor = 1.65

Sharma, G.; Goyal, A. K.; Singh, A. P. **(2019)**, Application of Design of Expert for the Development and Systematic Optimisation of L-Asparaginase loaded Nanoparticulate Carrier Drug Delivery Systems. *Journal of Drug Delivery and Therapeutics*, 9(3-s), 303-308. **Impact Factor = 2.25**

Singla, J.; Bajaj, T.; Goyal, A. K.; Rath, G. **(2019)**, Development of nanofibrous ocular insert for retinal delivery of fluocinolone acetonide. *Current eye research*, 44(5), 541-550. **Impact Factor = 1.7**

Sharma, G.; Rath, G.; Goyal, A. **(2019)**, Improved Biological Activity and Stability of enzyme L-Asparaginase in Solid Lipid Nanoparticles Formulation. *Journal of Drug Delivery and Therapeutics*, 9(2-s), 325-329. **Impact Factor = 2.25**

Chandel, A.; Goyal, A. K.; Ghosh, G.; Rath, G. **(2019)**,Recent advances in aerosolised drug delivery. *Biomedicine & Pharmacotherapy*, *112*, 108601.**Impact Factor = 4.5**

Vipin Kumar

Nath, V.; Ahuja, R.; Kumar, V. **(2019)**, Identification of novel G-protein-coupled receptor 40 (GPR40) agonists by hybrid in silico-screening techniques and molecular dynamics simulations thereof. *Journal of Biomolecular Structure and Dynamics*, *37*(14), 3764-3787. **Impact Factor = 3.2**



Rani, S.; Rana, R.; Saraogi, G. K.; Kumar, V.; Gupta, U. **(2019)**, Self-emulsifying oral lipid drug delivery systems: advances and challenges. *AAPS PharmSciTech*, *20*(3), 129. **Impact Factor = 2.4**

Devesh M. Sawant

Ansari, A. J.; Wani, A.; Maurya, A. K.; Verma, S.; Agnihotri, V. K.; Sharon, A.; Bharatam, P. V.; Sawant, D. M. **(2019)**, An unprecedented N- to C-sulfonyl migration in the reaction of azomethine amine and allenoates: Access to arylsulfonylmethyl substituted pyrazolo[1,5-c]quinazoline and mechanistic studies. *Chem Commun.* 55,14825-14828. **Impact Factor = 5.9**

Ansari, A. J.; Joshi, G.; Yadav, U. P.; Maurya, A. K.; Agnihotri, V. K.; Kalra, S.; Kumar, R.; Singh, S.; Sawant, D. M. **(2019)**, Exploration of Pd-catalysed four-component tandem reaction for one-pot assembly of pyrazolo[1,5-c]quinazolines as potential EGFR inhibitors. *Bioorg.Chem.*93, 103314.**Impact Factor = 3.9.**

Ansari, A. J.; Pathare, R. S.; Kumawat, A.; Maurya, A. K.; Verma, S.; Agnihotri, V. K.; Joshi, R.; Metre, R. K.; Sharon, A.; Pardasani, R. **(2019)**, A diversity-oriented synthesis of polyheterocycles via cyclocondensation of azomethine imine. *New Journal of Chemistry*, 35, 3721-1372. **Impact Factor = 3.06**.

Ansari, A. J.; Joshi, G.; Sharma, P.; Maurya, A. K.; Metre, R. K.; Agnihotri, V. K.; Chandaluri, C. G.; Kumar, R.; Singh, S.; Sawant, D. M. **(2019)**, Pd-Catalyzed Four-Component Sequential Reaction Delivers a Modular Fluorophore Platform for Cell Imaging. *Journal of Organic chemistry*, 84(7), 3817-3825. **Impact Factor = 4.8.**

Pathare, R. S.; Maurya, A. K.; Kumari, A.; Agnihotri, V. K.; Verma, V. P.; Sawant, D. M. (2019), Synthesis of quinazoline-3-oxides via a Pd (ii) catalyzed azide-isocyanide coupling/cyclocondensation reaction. *Organic and Biomolecular Chemistry*, 17(2), 363-368. **Impact Factor = 3.5**

Ruchi Malik

Verma, N.; Srivastava, S.; Malik, R.; Yadav, J. K.; Goyal, P.; Pandey, J. **(2020)**, Computational investigation for modelling the protein-protein interaction of TasA (28-261) 3 – TapA (33-253): a decisive process in biofilm formation by Bacillus subtilis. *BioRxiv*.doi.org/10.1101/2020.04.26.062109.

Kaushik, L.; Srivastava, S.; Panjeta, A.; Chaudhari, D.; Ghadi, R.; Kuche, K.; Malik, R.; Preet, S.; Jain, S.; Raza, K. **(2020)**, Exploration of docetaxel palmitate and its solid lipid nanoparticles as a novel option for alleviating the rising concern of multi-drug resistance. *Int. J. Pharm*, *578*, 119088. **Impact Factor = 4.845**

Sharma, S.; Srivastav, S.; Singh, G.; Singh, S.; Malik, R.; Alam, M. S. M.; Ali, S.; Akhter, M. **(2020)**, In silico strategies for probing novel DPP-IV inhibitors as anti-diabetic agents. *Journal of Biomolecular Structure and Dynamics*.doi.org/10.1080/07391102.2020.1751714. **Impact Factor = 3.2**

Mehta, P.; Srivastava, S.; Sharma, M.; Malik,R. **(2019)**,Discovery of novel chemotypes for competitive AMPA receptor antagonists as potential antiepileptic agents through structure-based virtual screening of natural products library. *Structural Chemistry*. *30*, 1159-1172. **Impact Factor = 2.08**

Srivastava, S.; Vengamthodi, A.; Singh, I.; Choudhary, B. S.; Sharma, M.; Malik, R. (2019), Determination of





comprehensive in silico determinants as a strategy for identification of novel PI3K α inhibitors. *Structural Chemistry*, 30, 1761–1778. **Impact Factor = 2.08**

Srivastava, S.; Mehta, P.; Sharma, O.; Sharma, M.; Malik, R. **(2019)**, Computationally guided identification of Akt-3, a serine/threonine kinase inhibitor: Insights from homology modelling, structure-based screening, molecular dynamics and quantum mechanical calculations. *Journal of Biomolecular Structure and Dynamics*,

doi.org/10.1080/07391102.2019.1675536. Impact Factor = 3.2

Mehta, P.; Malik, R. **(2019)**, Discovery and identification of putative Adenosine Kinase inhibitors as potential anti-epileptic agents from structural insights. *Journal of Biomolecular Structure and Dynamics*, doi.org/10.1080/07391102.2019.1699447. **Impact Factor = 3.2**

Sharma S.; Srivastava, S.; Shrivastava, A.; Malik, R.; Almalki, F.; Saifullah, K.; Alam, M. M.; Ali, M. S. S.; Akhter, M. (2019), Mining of potential dipeptidyl peptidase-IV inhibitors as anti-diabetic agents using integrated in silico approaches. *Journal of Biomolecular Structure and Dynamics*, doi.org/10.1080/07391102.2019.1701553. Impact Factor = 3.2

Srivastava, S.; Choudhary, B.; Mehta, P.; Sharma, S.; Malik, R. **(2019)**, Molecular dynamics insights for PI3K- δ inhibition & structure guided identification of novel PI3K- δ inhibitors. *Journal of Biomolecular Structure and Dynamics*, 37, 2404-2414. **Impact Factor = 3.31**

Kaisar Raza

Kaushik, L.; Srivastava, S.; Panjeta, A.; Chaudhari, D.; Ghadi, R.; Kuche, K.; Malik, R.; Preet, S.; Jain, S.; Raza, K. **(2020)**, Exploration of docetaxel palmitate and its solid lipid nanoparticles as a novel option for alleviating the rising concern of multi-drug resistance. *Int. J. Pharm*, *578*, 119088. **Impact Factor = 4.845**

Thakur, K.; Mahajan, A.; Sharma, G.; Singh, B.; Raza, K.; Chhibber, S.; Katare, O. P. **(2020)**, Implementation of Quality by Design (QbD) approach in development of silver sulphadiazine loaded egg oil organogel: An improved dermatokinetic profile and therapeutic efficacy in burn wounds. *International Journal of Pharmaceutics*, 576, p.118977.**Impact Factor = 4.845**

Misra, C.; Raza, K.; Goyal, A. K. **(2020)**, The Scope and Challenges of Vesicular Carrier-Mediated Delivery of Docetaxel for the Management of Cancer. *Current Drug Delivery*, https://doi.org/10.2174/1567201817666200623121633. Impact Factor = 1.58

Singh, B.; Sharma, T.; Saini, S.; Kaur, R.; Jain, A.; Raza, K.; Beg, S. **(2020)**, Systematic Development of Drug Nanocargos Using Formulation by Design (FbD): An Updated Overview. *Critical Reviews™ in Therapeutic Drug Carrier Systems*, *37*(3),DOI:10.1615/CritRevTherDrugCarrierSyst.2020032040.

Umesh Gupta

Sahoo, R. K.; Gothwal, A.; Rani, S.; Nakhate, K. T.; Ajazuddin; Gupta, U. **(2020)**,PEGylated Dendrimer Mediated Delivery of Bortezomib: Drug Conjugation versus Encapsulation. *International Journal of Pharmaceutics*, 584, 119389. **Impact Factor = 4.845**



Rani, S.; Gupta, U. (2020), HPMA Based Polymeric Conjugates in Anti-cancer Therapeutics. *Drug Discovery Today*, 25(6), 997-1012. Impact Factor = 7.321

Rani, S.; Sahoo, R. K.; Nakhate, K. T.; Ajazuddin; Gupta, U. **(2020)**, Biotinylated HPMA Centered Polymeric Nanoparticles for Bortezomib Delivery. *International Journal of Pharmaceutics*, 579, 119173. **Impact Factor = 4.845**

Gothwal, A.; Kumar, H.; Nakhate, K. T.; Ajazuddin; Dutta, A.; Borah, A.; Gupta, U. **(2019)**,Lactoferrin Coupled Lower Generation PAMAM Dendrimers for Brain Targeted Delivery of Memantine in Aluminum-Chloride-Induced Alzheimer's Disease in Mice. *Bioconjugate Chemistry*, 30(10), 2573-2583. **Impact Factor = 4.031**

Rajoria, S.; Rani, S.; Chaudhari, D.; Jain, S.; Gupta, U. **(2019)**, Glycine-Poly-L-Lactic Acid Copolymeric Nanoparticles for the Efficient Delivery of Bortezomib. *Pharmaceutical Research*, 36(160), 01-15. **Impact Factor = 3.242**

Khan, I.; Joshi, G.; Nakhate, K. T.; Ajazuddin; Kumar, R.; Gupta, U. **(2019)**, Nano-Co-Delivery of Berberine and Anticancer Drug using PLGA Nanoparticles: Exploration of Better Anticancer Activity and In Vivo Kinetics. *Pharmaceutical Research*, 36(149), 01-17. **Impact Factor = 3.242**

Singh, H.; Singh, J.; Singh, S. K.; Singh, N.; Paul, S.; Sohal, H. S.; Gupta, U.; Jain, S. K. **(2019)**, Vitamin E TPGS based palatable, oxidatively and physically stable emulsion of microalgae DHA oil for infants, children and food fortification. *Journal of Dispersion Science and Technology*, doi.org/10.1080/01932691. 2019.1634587 **Impact Factor = 1.701**

Gothwal, A.; Singh, II.; Jain, S. K.; Dutta, A.; Borah, A.; Gupta, U. (2019), Behavioral and Biochemical Implications of Dendrimeric Rivastigmine in Memory-Deficit and Alzheimer's Induced Rodents. *ACS Chemical Neuroscience*, 10(8), 3789-3795. Impact Factor = 4.486

Department of PhysicsManish Dev Shrimali

Dixit, S.; Asir, M. P.; Prasad, A.; Kuznetsov, N. V.; Shrimali, M. D.; **(2020)**, Spatial feedback control on multistability in hidden attractors. *Indian Academy of Sciences Conference Series*, in press. Impact Factor: **1.688** Priya, M.; Jaiswal, P. K.; Shrimali, M. D. **(2020)**, Host-parasite coevolution: Role of selection, mutation, and asexual reproduction on evolvability. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 30, 073103. Impact factor: **2.643**

Dixit, S.; Shrimali, M. D. **(2020)**, Static and dynamic attractive–repulsive interactions in two coupled nonlinear oscillators. *Chaos:An Interdisciplinary Journal of Nonlinear Science*, 30, 033114. Impact Factor: **2.643**

Sharma, A.; Yadav, K; Shrimali, M. D. Prasad, A.; Kuznetsov, N. V.; **(2020)**, Time varying feedback control on multi-stability in hidden attractor. *Eur. Phys. J. Special Topics*, 229, 1245. Impact Factor: **1.876**

Dixit, S.; Sharma, A.; Shrimali, M. D. **(2019)**, The dynamics of two coupled Van der Pol oscillators with attractive and repulsive coupling. *Physics Letters A*, 383, 125930. Impact Factor: **1.370**



Dixit, S.; Sharma, A.; Prasad, A.; Shrimali, M. D. **(2019)**, Dynamics of nonlinear oscillator with transient feedback. *International Journal of Dynamics and Control*, 7, 1015. Impact Factor: **1.520**

Ajit Kumar Patra

Nancy; Shukla, R.; Dhaka, R.; Dash, S.; Sarkar, S.; Barman, S. R.; Babu, P. D.; Sahoo, S. C.; Choudhary, R.; Saha, S.; Patra, A. K. **(2020)**, Spin-phonon coupling in Mn-Bi co-doped SmFeO₃: An experimental study. *Journal of Magnetism and Magnetic Materials*, 513, 167094. **Impact Factor= 2.723**

Yadav, S.; Das, S.; Patra, A. K.; Umapathy, G. R.; Ojha, S.; Patel, S. P.; Singh, R.; Katharria, Y. S. **(2020)**, Effects of Energetic Ion Irradiation on β -Ga₂ O₃ Thin Films. *ECS Journal of Solid State Science and Technology*, 9, 045015. **Impact Factor=2.142**

Nancy; Shukla, R.; Dhaka, R.; Dash, S.; Sahoo, S. C.; Bahera, B.; Babu, P. D.; Choudhary, R.; Patra, A. K. **(2020)**,Structural, dielectric and magnetic properties of Bi-Mn doped SmFeO₃.*Ceramic International* 46, 8730-8744.**Impact Factor=3.830**

Dash, S.; Patra, A.K.; Vasundhara, M.; Lukoyanov, A.V.; Baglasov, E. D.; Knyazev, Y. V.; Kuz'min, Y.I.; Shreder, E.I. **(2019)**, Electronic structure and optical properties of Mn100-xGex (x=20, 25 and 30) alloys near tetragonal-orthorhombic structural phase transition".*Physica Status Solidi* (b), 256, 1900155.ImpactFactor=1.481

Neeraj Panwar

Chourasiya, H. K.; Kulriya, P. K.; Panwar, N.; Kumar, S. **(2020)**, In-situ study of electrical transport in Pd/n-Si under high energy ion irradiation. *Semiconductor Science and Technology*, 35, 085004. **Impact Factor=2.710**

Kumar, P.; Yadav, M. K.; Panwar, N.; Kumar, A.; Singhal, R. (2019), Temperature dependent thermal conductivity of free-standing reduced graphene oxide/poly (vinylidene fluoride-co-hexafluoropropylene) composite thin film. *Materials Research Express*, 6. Impact Factor=1.929

Rajneesh Kumar Verma

Vikas; Yadav, M. K.; Kumar, P.; Verma, R. K. **(2020)**, Detection of adulteration in pure honey utilizing Ag-Graphene Oxide coated fiber optic SPR probes. *Food Chemistry*, 332127346. **Impact factor=6.306**

Vikas; Gupta, S.; Tejavath, K.; Verma,R. K. **(2020)**,Urea detection using bio-synthesized gold nanoparticles: an SPR/LSPR based sensing approach realized on optical fiber.*Optical and Quantum Electronics*, 52, 278.**Impact factor=1.842**

Vikas; Walia, K.; Verma, R. K. (2020), Lossy mode resonance based uniform core tapered fiber optic sensor for sensitivity enhancement". *Communications in Theoretical Physics*, (In Press). Impact Factor=1.322

Sukhmander Singh

Singh, R. P.; Singh, S.; Gill, R.; Kumar, R.; Sharma, P.; Kumar, G.; Adriaan, S. L. **(2020)**, Computational studies for the effective electrical conductivity of Copper powder filled LDPE/LLDPE composites. *Indian Journal of Pure & Amp; Applied Physics (IJPAP)*, Accepted. **Impact Factor = 0.653**



Sandeep Kumar

Devi, C.; Singhal, R.; Silva, K.; Paschoal, J. W.; Pettersson, H.; Kumar, S. **(2020)**, Electrical transport properties of InAs nanowires synthesized by a solvothermal method, *Nanotechnology*, 31, 235709. **Impact Factor= 3.551**

Kumar, S.; Corrêa, J. G. B.; Devi, C.; Madsen, D.; Johannes, A.; Ronning, C.; Paraguassu, W.; Paschoal, J. W.; Pettersson, H. **(2020)**, Evaluation of carrier density and mobility in Mn ion-implanted GaAs:Zn nanowires by Raman spectroscopy.*Nanotechnology*,31,205705.**Impact Factor=3.551**

Yugandhar Bitla

Bitla, Y.; Babu, P. D.; Kaul, S. N. **(2020)**, Magnetotransport in under and optimally hole-doped bulk nanocrystalline La1-xCaxMnO3 manganites. *J. Magn. Magn. Mater.* 501, 166291. **Impact Factor = 2.7**

Mallick, D.; Mandal, S.; Bitla, Y.; Ganesan, R.; Kumar, P. S. A. **(2019)**, Emergence of electron-phonon coupling in a dual topological insulator BiTe. *Mater. Res. Express*, 6, 126321. **Impact Factor = 1.9**

Department of Public Policy, Law and Governance Nagendra Ambedkar Sole

Farhat, Z.; Sole, N. A. (2019), Muslim Identity in India: Narratives of Social Exclusion and Inclusion. *History Research Journal*, 5(6), 3111-3126.

Prasad, S.; Sole, N. A. (2019), Pathalgadi: A Critical way to Empower the Gram Sabha. Sodh Sanchar Bulletin, 9(36), 130-134.

Yadav, T.; Sole, N. A. (**2020**), RTI (Amendment) Act, 2019: A Threat to Participatory Democracy. *South Asian Journal of Socio-Political Studies*, Vol. XX, No.2.

S. Kandasamy

Kandasamy, S. **(2019)**, Legal Issues in E-Commerce Industry in India. *Tripathaga-An International Journal*, Vol.II, 142-146, ISSN-2395-4290.

Anjan Kumar Sahu

Sahu, A. K. (2019), Referent object, securitising actors and the audience: The climate change threat and the securitisation of development in India. *Cambridge Review of International Affairs*, 2019, 1-24, ISSN: 0955-7571, Taylor & Francis. **Impact Factor = 1.366**

Sahu, A. K. (2019), The Democratic Securitization of Climate Change in India. *Asian Politics & Policy*, 11(3), 438-60. ISSN: 1943-0787, Wiley-Blackwell.

Cheruku Jeevan Kumar

Kumar, C. J. **(2019)**, Digital Governance and Social Welfare: An Assessment of Digital India Programme. *South Asian Journal of Socio-Political studies (SAJOSPS)*, 20(2) July – December **(2019)**.

Kumar, C. J. **(2019)**, Evidence based policymaking, E-content (four quadrants) in a MOOC Course on Public Policy: An Introduction offered by University of Hyderabad (August, **2019**).



Department of Social Work Jagdish Jadhav

Ram, H.; Jadhav, J. **(2019)**, Livelihood Complexity And Socio-cultural Exclusion: Case Study of Three Relocated Villages From Achanakmar Tiger Reserve of Chhattisgarh, Perspective in Social Work, Vol. *XXXIV*, (No. 2) - AUGUST-2019 ISSN 0974-5114, Pages 36-55 UGC approved under Social Sciences Sr. No. 218.

Subhasis Bhadra

Bhadra, S. **(2019)**, Livelihood Interventions with Marginalized Leprosy Affected Communities: A Life Course Perspective. *Journal of Social Work and Social Development*, 10(01), 51-72, ISBN 2229-6468.

Shaizy Ahmed

Das, P.; Ahmed, S. **(2019)**, Corporate Social Responsibility Practices of Rajasthan Electronics and Instruments Limited (REIL) Jaipur: A public sector undertaking, *Asian Journal of Multi-Dimensional Research*, 8(6), 104-113, ISSN 2278-4853.

Atiq Ahmed

Choudhary, N.G.; Ahmed, A. **(2020)**, The Role of Medical Social Worker to Manage Mental Health Issues of Tuberculosis Patients and Caregivers. *Shodh Sanchar Bulletin*. ISSN No. 2229-3620

Harikrishna, N.; Ahmed, A. **(2020)**, Mental Health Problems among School Students In Rural Andhra Pradesh: A Cross-sectional Study. *Shodh Sanchar Bulletin*. 10 (37(II)). ISSN No. 2229-3620.

Department of Sports Biosciences Chandra Sekhar Gahan

Garg, H.; Nagar, N.; Ellamparuthy, G.; Angadi, S. I.; Gahan, C. S. **(2019)**, Bench scale microbial catalysed leaching of mobile phone PCBs with an increasing pulp density. *Heliyon*, 5(12), 1-11.

Garg, H.; Nagar, N.; Ansari, M. N.; Ellamparuthy, G.; Angadi, S. I.; Akcil, A.; Gahan, C. S. **(2020)**, Bioleaching of waste mobile phone printed circuit board in controlled redox potential compared to non-controlled redox potential. *International Journal of Environmental Science and Technology*, 17, 3165-3176.

Nagar, N.; Garg, H.; Gahan, C. S. (2019), Integrated Bio-Pyro-Hydro-Metallurgical approach to recover metal values from petroleum refinery spent catalyst. *Biocatalysis and Agricultural Biotechnology*, 20, 101252.

Garg, H.; Nagar, N.; Sharma, P.; Kamwar, J.; Zaki, S.; Gahan, C. S. (**2019**), Effect of Increasing Concentrations of Chloride, Nitrate and Sulphate Anions with Their Counter Cations of Potassium, Sodium and Ammonium on Sulphur Bio-Oxidation by Sulphur Oxidizing Microorganisms. *Archives of Petroleum and Environmental Biotechnology*, **6**(1) 147.

Garg, H.; Nagar, N.; Dash, A.; Gahan, C. S. (2019), Efficiency assessment of pure Fe oxidizing microorganisms in iron supplemented and non-supplemented medium and pure S oxidizing microorganisms for bioleaching of mobile phone printed circuit boards. Bioscience Biotechnology Research Communications. Official journal of society for Science & Nature, 12(2), 425-434.



Nagar, N.; Garg, H.; Angadi, S. I.; Gahan, C. S. (2019), Influence of grinding time on bioleaching of copper from copper slag. Bioscience Biotechnology Research Communications. *Official journal of society for Science & Nature*, 12(2), 512-522.

Garg, H.; Nagar, N.; Behera, S.; Gahan, C. S. (2019), Comparative batch and fed-batch bioleaching of zinc from zinc sulphide concentrate using mixed culture of iron and sulphur oxidizing microorganisms. *NPI International Research Journal of Industrial and Environmental Biotechnology*, NPI Publishers. ISSN 2581-7906, 2(1),177-221.

Neha Singh

Magadum, A.; Singh, N.; Kurian, A. A.; Munir, I.; Mehmood, T.; Brown, K.; Sharkar, M.; Chepurko, E.; Sassi, Y.; Oh, J. G.; Lee, P.; Santos, C.; Gaziel-Sovran, A.; Zhang, G.; Cai, C. L.; Kho, C.; Mayr, M.; Shah, A. M.; Hajjar, R. J.; Zangi, L. (2020), Pkm2 Regulates Cardiomyocyte Cell Cycle and Promotes Cardiac Regeneration. *Circulation*, 141(15), 1249–1265. Impact Factor = 23.054.

Hemanth Naick Banavath

Hiregange; Disha; Naick, H.; Rao B. J. **(2020)**,ATR signalling mediates the prosurvival function of phospho-NPM against PIDDosome mediated cell death.*Cellular Signalling*, 109602.doi.org/10.1016/j. cellsig.2020.109602.**Impact Factor = 3.968.**

Ganesh; Krishna, N.; Pramod, B.; Madhanagopal, B. R.; Jain, P.; Naick, H.; Manoharan, M.**(2020)**, Receptor-Specific Delivery of Peptide Nucleic Acids Conjugated to Three Sequentially Linked N-Acetyl Galactosamine Moieties into Hepatocytes. *The Journal of Organic Chemistry*, doi.org/10.1021/acs.joc. 0c00601. **Impact Factor = 4.335.**

Department of Statistics Jitendra Kumar

Agiwal, V.; Kumar, J.; Shangodoyin, D. K. **(2020)**, Bayesian Analysis of Complete Multiple Breaks In Panel Autoregressive (CMB-PAR (1)) Time Series Model. *Statistics in Transition*, (accepted)

Kumar, A.; Kumar, J. **(2020)**, Bayesian Inference for C-AR Model with Spherically Symmetric Error. *Journal of Modern Applied Statistical Methods (accepted)*.

Kumar, J.; Agiwal, V.; Kumar, D.; Chaturvedi, A. **(2020)**, Bayesian Unit Root Test for AR (1) Model with Trend Approximated by Linear Spline Function. *Statistics, Optimization and Information Computing*, 8, 1-36.

Kumar, A.; Kumar, J.; Agiwal, V. **(2019)**, Bayesian Computation and Analysis of C-PAR (1) Time Series Model with Structural Break Paper Number. *Thailand Statisticians*, Paper Number TS124606.

Kumar, J.; Agiwal, V. **(2019)**, Bayesian estimation for fully shifted panel AR (1) time series model. *Thai Journal of Mathematics, Special Issue: Structural Change Modeling and Optimization in Econometrics*, 2018, 167–183

Kumar, J.; Agiwal, V. **(2019)**, Panel Data Unit Root Test with Structural Break: A Bayesian Approach. *Hacettepe Journal of Mathematics and Statistics*, 48(4), 1213–1231.



Arvind Pandey

Pandey, A.; Lalpawimawha, Misra, P. K.; Ralte, L. **(2019)**, Analysis of Bivariate Survival Data using shared Additive Hazard gamma frailty models. *Jordan Journal of Mathematics and Statistics*, 12(3), 347-368.

Pandey, A.; Bhushan, S.; Ralte, L.; Misra, P. K. **(2019)**, Comparison of additive shared frailty models under Lindley baseline distribution. *Communications in Statistics - Simulation and Computation*, DOI: 10.1080/03610918.2019.1664573.

Pandey, A.; Bhushan, S.; Ralte, L. **(2020)**, A Mixture Shared Gamma Frailty Model Under Gompertz Baseline Distribution. *Journal of the Indian Society for Probability and Statistics*, e-ISSN 2364-9569.

Ralte, L.; Pandey, A. **(2020)**, A Mixture Shared Inverse Gaussian Frailty Model under Modified Weibull Baseline Distribution. *Austrian Journal of Statistics*, 49, 31-42.

Pandey, A.;Ralte, L. **(2020)**, Comparison of Correlated Frailty Models. *Communication in Statistics-Simulation and Computation*, ISSN: 0361-0918 (Print) 1532-4141 (Online).

Pandey, A.; Shukla, S.; Mohbey, K. K. (2020), Comparative Analysis of a Deep Learning Approach with Various Classification Techniques for Credit Score Computation. *Recent Advances in Computer Science and Communications*, 12, 1-00

Pandey, S.; Yadav, B.; Pandey, A.; Tripathi, T.; Khawary, M.; Kant, S.; and Tripathi, D. Lessons from SARS-CoV-2 Pandemic: Evolution, Disease Dynamics and Future.

Sanjay Kumar

Kumar, S. **(2020)**, Monitoring Novel Corona Virus (COVID-19) Infections in India by Cluster Analysis. *Annals of Data Science*, 7(3), 417-425.

Kumar, S.; Chhaparwal, P. **(2019)**, Ratio- and Product-Based Estimators Using Known Coefficient of Variation of The Auxiliary Variable via Modified Maximum Likelihood. *Life Cycle Reliability and Safety Engineering*, 8(2), 99-116.

Kumar, S.; Kumar, S.; Oral, E. (2019), Robust ratio- and product-type estimators under non-normality via linear transformation using certain known population parameters. *Annals of Data Science* (Accepted) (doi.org/10.1007/s40745-020-00258-0)

Kumar, S. **(2020)**, Use of cluster analysis to monitor novel coronavirus-19 infections in Maharashtra, India. *Indian J Med Sci.*, 72(2), 44-48.

Kumar, K.; Kumar, S. **(2020)**, Two phase sampling exponential type estimators for population mean using auxiliary attribute in the presence of non-response. *International Journal of Mathematics and Statistics*, 21(1),75-85.

Deepesh Bhati

Bhati, D.; Sudheesh K. K.; Sreelaxmi, I.(2020), Jackknife empirical likelihood based inference for Probability weighted moments. *Journal of the Korean Statistical Society*. (Accepted)



Bhati, D. **(2019)**, A test procedure for distinguishing logarithmically decaying tail from polynomially decaying tail. *Journal of the Korean Statistical Society*, doi.org/10.1007/s42952-019-00038-4.

Bhati, D.; Sudheesh, K. K. **(2019)**, Test for regularly varying v/s rapidly/slowly varying upper tail. *Journal of Indian Society of Probability and Statistics*, Springer. doi.org/10.1007/s41096-019-00070-x.

Bhati, D.; Enrique, C.; Mareeswaran, M. **(2019)**, A New Heavy Tailed Class of distributions which Includes the Pareto. *RISK*. MDPI.

Bhati, D.; Shudheesh, K. K. **(2019)**, Jackknife empirical likelihood test for testing one-sided Lévy distribution. *Journal of Applied Statistics*, DoI: 10.1080/02664763.2019.1672630.

Bhati, D.; Ahmed I. S. **(2019)**, On Uniform-Negative Binomial Distribution including Gauss Hypergeometric Function and its Application in Count Regression Modelling. *Communication in Statistics: Theory and Methods*. doi.org/10.1080/03610926.2019.1682163.

Mahendra Saha

Saha, M.; Dey, S.; Yadav, A. S.; Kumar, S. **(2019).** Classical and Bayesian inference of Cpy for generalized Lindley distributed quality characteristic. *Quality and Reliability Engineering International*, 1-19.

Saha, M.; Kumar, S.; Maiti, S. S.; Yadav, A. S.; Dey, S. **(2019)**. Asymptotic and Bootstrap Confidence Intervals for the Process Capability Index cpy Based on Lindley Distributed Quality Characteristic. *American Journal of Mathematical and Management Sciences*, doi.org/10.1080/01966324.2019.1580644.

Kumar, S.; Dey, S.; Saha, M. **(2019).** Comparison between two generalized process capability indices for Burr XII distribution using bootstrap confidence intervals, Life Cycle Reliability and Safety Engineering, 8,347-355.

Dey, S.; Saha, M. **(2020).** Bootstrap Confidence Intervals of Process Capability Index Spmk using Different Methods of Estimation. *Journal of Statistical Computation and Simulation*, 90(1), 28-50.

Maiti, S. S.; Bhattacharya, A.; Saha, M. **(2020).**On generalizing lifetime performance index.*Life Cycle Reliability and Safety Engineering*, doi.org/10.1007/s41872-020-00133-0.

Department of Yoga

Sanjib K. Patra

Chobe, S.; Chobe, M.; Metri, K.; Patra, S. K.; Nagaratna, R. (2020), Impact of Yoga on cognition and mental health among the elderly: A systematic review. *Complementary Therapies in Medicine*, 102421.

Acharya, K.; Kuanar, B. A. G.; Maity, K.; Patra, S.; Pradhan, B. (2020), Impact of different styles of mantra chanting on healthy individuals based on cognitive task. *Indian Journal of Psychology*, 3(2), 37-45.

Acharya, K.; Patra, S.; Pradhan, B.; Maity, K. (2019), Autonomic and respiratory changes following various styles of Mantra chanting. *Journal of Quality health research-JqHR*, 2(3), 31-36.

Kashinath G. Metri

Chobe, S.; Chobe, M.; Metri, K.; Patra, S. K.; Nagaratna, R. (2020), Impact of Yoga on cognition and mental health among the elderly: A systematic review. *Complementary Therapies in Medicine*, 102421.



Leibel, L.; Metri, K.; Prasad, R.; Mears, G. (2020), Role of Joint Loosening Yoga In Management Of Aromatase Inhibitor-Induced Arthralgia In Breast Cancer Survivors: 3537 Board# 358 May 29 2: 30. *Medicine & Science in Sports & Exercise*, 52(7).

Poojari, S.; Ghai, B.; Kashinath, G. M.; Gupta, S. J.; amp; Verma, P. (2020), Chronic low back pain: Can Yoga as an integrative approach be the best way forward?. *Integrative Medicine Case Reports* 1(1).

Kashinath, M. (**2019**), Clinical Roundup: Selected Treatment Options for Multiple Sclerosis—Part 2. *Alternative and Complementary Therapies*, 25(5), 271.

Rathi, S.; Jalandhara, S. A.; Nagaratna, R.; Kashinath, G. M. (2000). Conservative and non-surgical management of lumbar disc herniation. *Integrative Medicine Case Reports*, 1(1).

Shivaji Chobe

Chobe, S.; Chobe, M.; Metri, K.; Patra, S. K.; Nagaratna, R. (2020), Impact of Yoga on cognition and mental health among the elderly: A systematic review. *Complementary Therapies in Medicine*, 102421.

Meenakshi, P.; Shivaji, V. C. (2019), Yoga for Multiple Sclerosis: Selected Treatment Options for Multiple Sclerosis: Part 2. *Journal of Alternative and Complementary Therapies*, 25(2),1-7.

Meenakshi, P.; Shivaji, V. C. (2019), Yoga for Stroke: Selected Treatment Options for Stroke: Part 2. *Journal of Alternative and Complementary Therapies*, 25(2), 3-4.

Shivaji, V. C.; Meenakshi, P. (2020), Yoga for Overactive Bladder: Selected Treatment Options for Overactive Bladder: Part 2. *Journal of Alternative and Complementary Therapies*, 26(1), 1-3.

Meenakshi, P.; Ramesh, M. N.; Shivaji, C. (2020), Designing and validation of a yoga-based intervention module for Obesity with metabolic comorbidities. *Journal of Complementary and Integrative Medicine*, 18(2).

Meenakshi

Chobe, S.; Chobe, M.; Metri, K.; Patra, S. K.; Nagaratna, R. (2020), Impact of Yoga on cognition and mental health among the elderly: A systematic review. *Complementary Therapies in Medicine*, 102421.

Meenakshi, P.; Shivaji, V. C. (2019), Yoga for Multiple Sclerosis: Selected Treatment Options for Multiple Sclerosis: Part 2. *Journal of Alternative and Complementary Therapies*, 25(2),1-7.

Meenakshi, P.; Shivaji, V. C. (2019), Yoga for Stroke: Selected Treatment Options for Stroke: Part 2. *Journal of Alternative and Complementary Therapies*, 25(2), 3-4.

Shivaji, V. C.; Meenakshi, P. (2020), Yoga for Overactive Bladder: Selected Treatment Options for Overactive Bladder: Part 2. *Journal of Alternative and Complementary Therapies*, 26(1), 1-3.

Meenakshi, P.; Ramesh, M. N.; Shivaji, C. (2020), Designing and validation of a yoga-based intervention module for Obesity with metabolic comorbidities. *Journal of Complementary and Integrative Medicine*, 18(2).



B. BOOK/BOOK CAPTERS/EDITOR OF BOOK

Department of Biochemistry Chandi C. Mandal

Soni, S.; Bandyopadhayaya, S.; Mandal, C. C. Animal Models Systems of Cancer for Preclinical Trials, Pharmacotherapeutic Botanicals for Cancer Chemoprevention 978-981-15-5998-3 (In press, **2020**)

Shrama, A.; Priyanshi; Mandal, C. C. Modulation of Cancer Cell Metabolism and Microenvironment by Phytochemicals, Pharmacotherapeutic Botanicals for Cancer Chemoprevention, 978-981-15-5998-3, Springer (In press, **2020**)

Vijayvergia, U.; Bandyopadhayaya, S.; Mandal, C. C.; Biphasic Effects of Phytochemicals and their Relevance to Cancer Therapeutics, Pharmacotherapeutic Botanicals for Cancer Chemoprevention, 978-981-15-5998-3, Springer (In press, **2020**)

Sharma, T.; Mandal, C.C.; Technological Advancement in Cancer Stem Cell Research, Cancer Stem Cells: New Horizons in Cancer Therapies, 978-981-15-5119-2, Springer (In press, **2020**)

Bandyopadhayaya, S.; Mandal, C. C., A Differential Role of miRNAs in Regulation of Breast Cancer Stem Cells, Cancer Stem Cells: New Horizons in Cancer Therapies, 978-981-15-5119-2, Springer (In press, **2020**)

Bandyopadhayaya, S.; Mandal, C. C., Blood-Based Biomarkers for the Diagnosis and Prognosis of Cancer, Precision Medicine in Oncology (Editor: James A. Radosevich), 9781119432449, Wiley Blackwell (In press, **2020**)

Dipak Gayen

Mondal, S.; Gayen, D.; Karmakar, S.Improvement of nutritional quality of rice seed through classical breeding and advance genetic engineering, Rice Research for Quality Improvement: Genomics and Genetic Engineering, **2020**, Springer: 541-562.

Department of Biotechnology

A. K. Gupta

Dubey, N. K.; Gupta, K.; Yadav, P.; Panigrahi, J.; Gupta, A. K., Transgenic Strategies to Develop Resistant Plant Against the Pathogen and Pest, (2020). doi.org/10.1002/9781119432241.ch14

Janmejay Pandey

Pandey, J., Relative Influence of 'physico-chemical variables' and 'indigenous bacterial diversity' on efficiency of bioaugmentation mediated in situ bioremediation in Bioremediation Technology: Hazardous Waste Management Ed: M. H. Fulekar & B. Pathak, CRC Press, (2019), 978-036-72-7310-1.

Jayendra Nath Shukla

Shukla, N.; Meghvanshi, K.; Shukla, J. N., Role of Nanotechnology in the Management of Agricultural Pests Biogenic Nano-Particles and their Use in Agro-ecosystems, (2020), 85-98

Surendra Nimesh

Plant Based Bioactive Compounds as an Alternative for Cancer Treatment, Sharma, N.; Kumari, R.M.;





Gupta, N.; Nimesh, S. Herbal Medicine: Back to the Future, Eds. Ferid Murad, Atta-ur-Rahman, Ka Bian (Bentham Science Publishers Pte. Ltd. Singapore), Vol 3 (2019), 251-246.

Department of Chemistry

R.T.Pardasani

Pardasani, R. T., Submitted Volumes 1-4 titled Magnetic Susceptibility of Paramagnetic Compounds to Springer Germany/USA in December **2019**, under publication.

Chandrakanta Dash

Yaday, S.; Dash, C. Transition Metal-Catalyzed Cross-Coupling Reactions on Heterocycles Synthesis Using Tandem/Domino Synthetic Approaches, in the book entitled "Cross-Coupling Reactions: An Overview", Nova Science Publishers, Inc., New York, USA(2020),61–112.

Department of Computer Science and Engineering Muzzammil Hussain

Jain, U.; Hussain, M., Underwater Wireless Sensor Networks, Handbook of Computer Networks and Cyber Security, Springer Cham, 2020, 227 – 245.

Yadav, K.; Hussain, M.An Extended Polyalphabetic Cipher Using Directional Shift Patterns. In: Raju K., Senkerik R., Lanka S., Rajagopal V. (eds) Data Engineering and Communication Technology, Advances in Intelligent Systems and Computing, (2020), vol 1079. Springer, Singapore.

Singh, V. P.; Aggarwal, N.; Hussain, M.; Raina, C. K.A New Approach to Provide Authentication Using Acknowledgment. In: Pati B., Panigrahi C., Misra S., Pujari A., Bakshi S. (eds) Progress in Advanced Computing and Intelligent Engineering. Advances in Intelligent Systems and Computing, (2019), vol 713. Springer, Singapore.

Department of Culture and Media Studies Pranta Pratik Patnaik

Patnaik, P. P., Silent Public and Speaking Selves: Locating 'Public Sphere' through Classroom Practices, in Suresh Babu G.S. (ed) Education and the Public Sphere. Exploring the Structures of Mediation in Post-Colonial India. Routledge: London. (ISBN No. 9781351024181). (2019), 203-217

Patnaik, P. P. Public Spaces and Private Intimacies: The 'Politics of Belonging' in Parks, in Kaustav Chakraborty (ed) The Politics of Belonging in Contemporary India. Anxiety & Intimacy. Routledge: London. (ISBN No.9780429295980). (2019), 167-179

Patnaik, P. P. The Art of Showing: Imagining Development in Indian Mediascape, in Pathak, D. and Das, A (eds) Investigating Developmentalism. Notions of Development in the Social Sphere. Palgrave Macmillan: Cham (UK). (ISBN No.978-3-030-17442-2). (2019), 73-96

Department of Economics

Hemlata Manglani

Manglani, H.; Managerial Economics, ISBN:978-93-89462-15-9, Neelkanth Publishers (P) LTD., India, **Edition 2019**

Manglani, H.; "Research Methods in Management" ISBN:978-93-89462-21-0, Neelkanth Publishers (P) LTD., India, Edition-2019



Department of Education

Anjali Sharma

Sharma, A. Contemporary Indian Society: Issues and Challenges (Book Chapter). Contemporary Indian Society: Issues and Challenges with special reference to North East India. Edition First. Akhand Publishing House, Delhi. ISBN:978-93-88998-15-4. (2019), Vol 1. Page No. 1-12.

Narendra Kumar

Kumar, N.; Jyoti, J. (2020). Acculturation, Acculturative Stress and Coping Strategies for Acculturative Stress, published in Edited Book *Health Care Challenges in India:Psycho-Social Perspectives*, (2020), 409-418. Global Vision Publishing House, New Delhi.ISBN-978-81-944023-2-9.

Department of Electronics & Communication Engineering Rajan Singh

Singh, R.; Kolte, J. *Transition Metal Oxide-Based Multiferroic Materials for Spintronics and Energy-Harvesting Applications* under book title "Multifunctional Nanostructured Metal Oxides for Energy Harvesting and Storage Devices" Taylor & Francic Group (2020). *DOI: 10.1201/9780429296871-4*.

Department of English

Bhumika Sharma

Sharma, R.; Sharma, B. *The Sense of Being*. Yking Books. **2019**. ISBN 978-93-87945-73-9. Sharma, R.; Sharma, B. *The Logic of Consciousness*. Yking Books. **2019**. ISBN 978-93-87945-74-6.

Neha Arora

Arora, N. A World Beyond Pink and Blue: New Perspectives on Gender Roles. In: Purshottam, K., editor. Ahead of their Times: Essays on Women Autobiography in India. New Delhi: Kalpaz Publications, (2020), 197-212.

Arora, N. Sanitizing Ismat, Losing Ismat: The Question of Untranslatability of Gender in Chughtai's "Chowthi ka Jowra". In: K K Singh (et al), editor. Contemporary Indian Writing in English: Select Critical Perspectives. Jaipur: Book Enclave; (2020),10-19.

Arora, N. "Dislocation and Relocation: Understanding the Schizophrenia of Immigrant Women in Chitra Banerjee Divakaruni's Arranged Marriage. In: (ed) Mohammad Tariq. Diaspora as Cathartic Metaphor: A Hermeneutical Approach. New Delhi: Blue Rose Publishers; (2020), 119-146.

Department of Environmental Science

L.K. Sharma

Pandey, P. Sharma, L.K. (Ed.) "Advances in Remote Sensing for Natural Resource Monitoring". WILEY-Publishing, ISBN:9-781119-61597-2. (2020).

Garima Kaushik

Dar, M. A.; Kaushik, G.; JFV Chiu Pollution status and biodegradation of organophosphate pesticides in the environment Abatement of Environmental Pollutants, Publisher: Elsevier. (2020), 25-66.

Vidyalaxmi and Kaushik, G. Toxicity of Hexavalent Chromium in Environment, Health Threats, and Its Bioremediation and Detoxification from Tannery Wastewater for Environmental Safety, Bioremediation



of Industrial Waste for Environmental Safety, Publisher: Springer ISBN: 978-981-13-1891-7. (2019), 223-243.

Ritu Singh

Kumar, S.; Kumari, N.; Karmakar, S.; Ankit, S. R.; Behera, M.; Rani, A.; Kumar, N. Advances in plant-microbe-based remediation approaches for environmental cleanup. Springer nature, Singapore, ISBN 978-981-15-1389-3.pp 103-128,

Singh, R.; Behera, M.; Kumar, S. Nano-Bioremediation: An Innovative Remediation Technology for Treatment and Management of Contaminated Sites. In: Bharagava R., Saxena G. (eds) Bioremediation of Industrial Waste for Environmental Safety. Springer, Singapore.https://doi.org/10.1007/978-981-13-3426-9_7 Springer Nature, Singapore.ISBN 978-981-13-3425-2.

Department of Microbiology Pradeep Verma

Agrawal, K.; Verma, P. Laccase-Mediated Synthesis of Bio-material Using Agro-residues. In Biotechnological Applications in Human Health, Springer, Singapore, (2020), 87-93,

Bhardwaj, N.; Verma, P. Extraction of Fungal Xylanase Using ATPS-PEG/Sulphate and Its Application in Hydrolysis of Agricultural Residues.In Biotechnological Applications in Human Health, Springer, Singapore. (2020), 95-105,

Agrawal, K.; Verma, P. Degradation and detoxification of waste via bioremediation: a step toward sustainable environment, In Emerging Technologies in Environmental Bioremediation, Elsevier, (2020), 67-83,

Agrawal, K.; Bhatt, A.; Chaturvedi, V.; Verma, P. Bioremediation: an effective technology toward a sustainable environment via the remediation of emerging environmental pollutants, In Emerging Technologies in Environmental Bioremediation, Elsevier (2020), 165-196.

Agrawal, K.; Bhatt, A.; Bhardwaj, N.; Kumar, B.; Verma, P. Integrated Approach for the Treatment of Industrial Effluent by Physico-chemical and Microbiological Process for Sustainable Environment, In Combined Application of Physico-Chemical & Microbiological Processes for Industrial Effluent Treatment Plant, Springer, Singapore. (2020), 119-143.

Kumar, B.; Bhardwaj, N.; Agrawal, K.; Verma, P. Bioethanol Production: Generation-Based Comparative Status Measurements, In Biofuel Production Technologies: Critical Analysis for Sustainability, Springer, Singapore, (2020), 155-201.

Agrawal, K.; Bhatt, A.; Bhardwaj, N.; Kumar, B.; Verma, P. Algal Biomass: Potential Renewable Feedstock for Biofuels Production—Part I, In Biofuel Production Technologies: Critical Analysis for Sustainability, Springer, Singapore, (2020), 203-237.

Kumar, B.; Agrawal, K.; Bhardwaj, N.; Chaturvedi, V.; Verma, P. Techno-Economic Assessment of Microbe-Assisted Wastewater Treatment Strategies for Energy and Value-Added Product Recovery, In Microbial Technology for the Welfare of Society, Springer, Singapore, (2019) 147-181.



Akhil Agrawal

Rellegadla, S.; Jain, S.; Agrawal, A. Application of Nanoparticles-Based Technologies in the Oil and Gas Industry, Nanotechnology for Energy and Environmental Engineering, Springer, Cham. (2020), 257-277 Prajapat, G.; Jain, S.; Agrawal, A. Microbial Diversity and Dynamics in Hydrocarbon Resource Environments. Microbial Diversity in Ecosystem Sustainability and Biotechnological Applications, Springer, Singapore. (2020), 533-571.

Nidhi Pareek

Kumar, M.; Vivekanand, V.; Pareek, N. Insect chitin and chitosan: structure, properties, production and implementation prospective, In: Kumar D., Shahid M. (eds.) Natural Materials and Products from Insects: Chemistry and Applications. Springer, Cham, ISBN 978-3-030-36610-0. https://doi.org/10.1007/978-3-030-36610-0_4, (2020), 51-66

Brar, A.; Kumar, M.; Vivekanand, V.; Pareek, N. Nanoparticles and their role in bioenergy production. In: Thangadurai D., Sangeetha J., Prasad R. (eds.) Nanotechnology for Food, Agriculture, and Environment. Nanotechnology in the Life Sciences, Springer, Cham, ISBN 978-3-030-31938-0.https://doi.org/10.1007/978-3-030-31938-0_11, (2020), 227-254.

Deekhsa Tripathi

Pandey, S.; Shukla, N.; Singh, S.S.; Tripathi, D.; Tripathi, T.; Kant, S. Bacterial Metabolic Fitness During Pathogenesis. In: Singh, R.; Manchanda, G.; Maurya, I.; Wei, Y. (eds) Microbial Versatility in Varied Environments, Springer, Singapore, ISBN: 978-981-15-3028-9. (2020), DOI: 10.1007/978-981-15-3028-9_12.

Department of Pharmacy

Amit Kumar Goyal

Goyal, A. K.; Rath, G.; Faujdar, C.; Malik, B. Application and perspective of pH-responsive nano drug delivery systems. In *Applications of Targeted Nano Drugs and Delivery Systems*, Elsevier. **(2019)**, 15-33.

Umesh Gupta

Yadav, A.; Gupta, U.; Sharma, R. (editors) Nano Drug Delivery Strategies for the Treatment of Cancers. Academic Press; 1st edition (ISBN: 9780128197936). **(2020)**.

Gothwal, A.; Khan, I.; Gupta, U. Dendrimer Nanohybrids for Drug Delivery. Handbook of Materials for Nanomedicine, Polymeric Nanomaterials. *Edited By, Vladimir Torchilin*. Jenny Stanford Publishing, **(2020)**, volume 7, 213-239.

Jain, A. K.; Gupta, U. "Nanomaterials Used for Delivery of Bioactives". Nanomaterials and Environmental Biotechnology. Nanotechnology in the Life Sciences. Springer, Cham: 381-405. (ISBN 978-3-030-34543-3). (2020).

Gothwal, A.; Rani, S.; Gupta, U.; Jain, N. K. "Toxicity and Biocompatibility Aspects of Dendrimers". Pharmaceutical Applications of Dendrimers. Elsevier Inc. :251-274. (ISBN 9780128145272). (2020).



Department of Physics Sukhmander Singh

Singh, S.; Waves and Instabilities in E X B Dusty Plasma in the book "Thermophysical Properties of Complex Materials" (ISBN 978-1-78984-889-2) IntechOpen, London, United Kingdom, (2019).

Singh, S. Rayleigh Taylor Instability in Fluid dynamics in the book Engineering Fluid Mechanics (ISBN 978-1-83968-271-1) IntechOpen, London, United Kingdom, (2020).

Singh, S.; Hall Thruster: An Electric Propulsion through Plasmas in the book Plasma Science (ISBN 978-1-83962-679-1) IntechOpen, London, United Kingdom, (2020).

Department of Public Policy, Law and Governance Nagendra Ambedkar Sole

Sole, N. A.; Bhadra, S. (Ed.) Social Policies in India: Contemporary Perspectives, New Delhi: ABD Publishers. (2019).

Sole, N. A. (Ed.) Governance in India: Fresh Perspectives, New Delhi, Segment Books. (2020).

Sole, N. A.; Babu, S. S. (Ed.) Public Policy in India: Changing Contours, New Delhi: Segment Books. (2020).

Sole, N. A.; Kumar, R.; Meena, J. S. (Ed.) Emerging Trends: Engaging in Policy and Service Delivery for the 21st Century, New Delhi, Akhand Publishing House. (2020).

Sole, N. A.; Bhadra, S. Social Policies in India-Contemporary Reflections. In Nagendra Ambedkar Sole and Subhasis Bhadra, Social Policies in India: Contemporary Perspectives (pp.01-15), New Delhi: ABD Publishers. (2019).

Prasad, S.; Sole, N. A. Policy Perspectives for the Inclusive Development of the Tribal India, In Nagendra Ambedkar Sole and Subhasis Bhadra, Social Policies in India: Contemporary Perspectives (pp.98-113), New Delhi: ABD Publishers. (2019).

Pareek, U.; Sole, N. A. Governance: Concept, Meaning and Dimensions. In Nagendra Ambedkar Sole (ed.), Governance in India: Fresh Perspectives, New Delhi: Segment Books. **2020**, 08-27,

Yadav, T.; Sole, N. A. Reforms in Higher Education: New Public Management and New Managerialism. In Nagendra Ambedkar Sole and S. Sudhakar Babu (Ed.), Public Policy in India: Changing Contours, New Delhi: Segment Books. (2020), 16-28.

Sole, N. A.; Yadav, T. Shared Governance in Higher Education Practical Responses at Global level. In Nagendra Ambedkar Sole (Ed.), Governance in India: Fresh Perspectives, New Delhi: Segment Books. (2020), 107-120.

Pareek, U.; Sole, N. A.A Comparative Study of Various States Public Services Guarantee Acts in India.In Rajesh Kumar et al. (Ed.), Emerging Trends in Public Administration: Engagement in Policy and Service Delivery for the 21st Century, New Delhi: Akhand Publishing House. (**2020**), 29-54.



Cheruku Jeevan Kumar

Leadership Styles and Governance in Ethiopia, Kalpaz Publishers, New Delhi, **2019**. ISBN-9789353241889 (With Waqgari Negari)

Developmental State in 21st Century (with Naveen Kolloju), in Book titled: *Contours of Public Policy and Governance in India: Festschrift in honour of Prof. I. Ramabrahmam* edited by SN Ambedkar and Sudhakar Babu, Segment Publishers, New Delhi, **2020**.

Department of Social Work Jagdish Jadhav

Governance, Populist Economy and political Response in Water Sector; Reflections from Maharastra, (2016) in International Conference on Political Economy of Water, Edited by Geeta Balakrishnan et.al. Cambridge Scholar Publishing, England (ISBN: 978-14-43888-8-6)

Indigenous and Indianised Social Work Education in India: A Way Forward (2020) in Bishnu Mohan Das and etc (ed) Indian Social Work, Roultage and Taylor and Francis Group

Water Economy, Populist Politics and Governance: Missing Boats in Water sector: A Case Study of Maharashtra State of India in Mukul Babel & etl (ed) (2020) Water Security in Asia, Opportunities and Challenges in the Context of Climate change, Springer

Water, http://www.springer.com/us/book/9783319546117

Subhasis Bhadra

Tayal, N.; Bhadra, S. The life events and Stress among the Discordant Couples (DCs): emerging need for an effective Governance Framework and Adequate Policy Measures; In Sole AN edited *Governance in India*, Segment Books, New Delhi, (2020), 210-221, ISBN 9789381513165

Kausar, R.; Bhadra, S. Assessing the Violation of Rights to Education in the Context of Indigenous Understanding of Child Rights, In Indigenising Social Work Practices in India, By Popli UK, Sigh AK, Bloomsbury, (2019), 122-132, ISBN: 978-93-89351-57-6

Deb, S.; Bhadra, S.; Sunney, S.; Sahay, S. Childhood to Adolescence: Issues and Concerns, Pearson-India, (2020), ISBN: 978-93-534-3692-6

Rajeev M. M

Safeguarding the Needs and Rights of the Children and their Inclusion in Disaster Risk Reduction and Risk Management, Conturing Caste: Manifestations And Implications, Lokmitra (Publisher) Delhi. 978-93-80347-00-0 (ISBN No), pp. 124-137.

Disaster Management in India: Examining Policy Concerns and Challenges, Social Policies in India-Contemporary Perspectives, ABD (Publisher), 9788183766876, pp 218-233.

Shaizy Ahmed

Manupriya, Ahmed, S. A handbook on nutritional needs and caregiving practices for tribal women and children; Aastha Prakashan, Jaipur, Rajasthan, (2019), ISBN: 978-81-941-662-1-4



Department of Yoga Kashinath G. Metri

Nagaratna; Metri, K. Monograph Chapter: Role of Yoga in emergency medicine. Indian College of Physicians. (2020).

Tripathi, S.; Metri, K.; Sharma, P.; Singh, A. Book Chapter: Ayurveda and Yoga for Asthma and allergies. Text Book of Allergy for The Clinician. (2020).

Non-Teaching Staff Publications

Iournal Publications

Saroja Kumar Panda, Assistant Librarian

Panda, S. K.,& Pandya, M. K. (2019). A Bibliometrics Analysis of the Journal "Library and Information Science Research" from 2008–2017. *Journal of Library and Information Communication Technology*, 8(2), 8-20.

Book/Book Chapters/Editor of Book

Dr. Vijayakumar M., Librarian

Mallapa, Vijayakumar and Gupta, Sobhagyawati (2019). Use of Social Networking Sites in Information and Communication Environment, Published in a edited book by Pravakar Rath and Amit Kumar 'Social Media and Librarianship: Connecting the Communities' Today & Tomorrow's Printers & Publishers, New Delhi, p. 197-206 ISBN: 9788170196631

Mallapa, Vijayakumar and Gupta, Sobhagyawati (2020). Use of Electronic Gadgets by LIS Professionals to Access Social Networking Sites, Published in a edited book by Mallikarjun Angali, et.al. 'Digital Technologies and Tranformation in Academic Libraries (2 Vol.)'Shree Publishers & Distributors, New Delhi, v. 2. p. 280-285, ISBN: 9788194194002

Sobhagyawati Gupta, Assistant Librarian

Mallapa, Vijayakumar and **Gupta, Sobhagyawati** (2019). Use of Social Networking Sites in Information and Communication Environment, Published in a edited book by Pravakar Rath and Amit Kumar 'Social Media and Librarianship: Connecting the Communities' Today & Tomorrow's Printers & Publishers, New Delhi, , p. 197-206 ISBN: 9788170196631

Mallapa, Vijayakumar and **Gupta, Sobhagyawati**(2020). Use of Electronic Gadgets by LIS Professionals to Access Social Networking Sites, Published in a edited book by Mallikarjun Angali, et.al. 'Digital Technologies and Tranformation in Academic Libraries (2 Vol.)'Shree Publishers & Distributors, New Delhi, v. 2. p. 280-285, ISBN: 9788194194002



Extramural Funding Projects

The Central University of Rajasthan is operating the following 115 research projects during the academic year 2019-2020 in its various departments. These extramural projects have been funded by various funding agencies from India as well as from foreign countries such as Department of Science & Technology, University Grant Commission, Department of Biotechnology, Council of Scientific & Industrial Research, Inter University Accelerator Centre, Indian Council of Social Science Research, Ministry of Water Resources, Asia-Pacific Network for Global Change Research (Japan). More details about the ongoing research projects are following.

SCHOOL OF CHEMICAL SCIENCES AND PHARMACY

DEPARTMENT OF CHEMISTRY

DST-FIST (Level-1 category)	70.5 Lakhs	2016-2021	DST, GoI
Prof. R. T. Pardasani			
A Divergent Synthesis of Benzazoles via Direct C-H Activation and their Cytotoxic Activity: A Way to Cancer Research	25.7 Lakhs	2017-2020	DST-EMR
Dr. Easwar Srinivasan			
Studies on the Organocatalytic Enantioselective Construction of Tetrahydroxanthenones	40.0 Lakhs	2018-2021	SERB
Design of Novel Bifunctional Amine-Urea/Thiourea Catalysts for Asymmetric C-C Bond Forming Applications	28.0 Lakhs	2017-2020	CSIR
Studies on the Asymmetric Mannich and Michael Addition Reactions Catalyzed by a Folding Bifunctional Organocatalyst	Mobility Grant (1.0 lakh)	2019	DST-Academy of Finland (Collaborative)
Dr. Anuj Sharma			
Smart Metal Chelator for MRI Contrast Agent	35.0 Lakhs	2014-2019	DST
Multifunctional Small Molecule based on Azo-Stilbene Molecular Framework as Amyloid Imaging Agents and Metal Chelators for Controlling Metal Induced-Neurodegenrative Diseases	54.3 Lakhs	2016-2019	DST-SERB
Design and Synthesis of Selected Transition Metal (Fe, Ru, Rh, Ir) complexes/Arene Complexes and Investigating their Anticancer Potential	10.0 Lakhs	2018-2021	UGC
Crystal Engineering and Molecular Magnetism in Some 3d Bivalent Metal Organic Framework (*Mentor of Dr. Kishalay Bhar, NPDF)	19.2 Lakhs	2017-2019	SERB, N-PDF
Dr. M. Bhanuchandra			
Development of Sustainable Reactions and Methods using Dibenzothiophene 5,5-Dioxide: Synthesis of Pi-Conjugated Systems	38.72 Lakhs	2017-2020	DST-SERB





Development of Novel Strategies for the Construction of Benzothiophene Dioxide	10.0 Lakhs	2017-2019	UGC
Transition Metal-Catalyzed C-H Nitrogenation and Oxygenation of Arenes using Sulfoxides as Functionalizable Directing Groups		2018-2021	SERB
Dr. Thirumoorthi R.			
Half Sandwich Organotellurium Oxides/Hydroxides: An Alternative Reagent in Organic Synthesis	9.0 Lakhs	2019-2022	CSIR
Dr. Partha Roy			
Development of the Various One-dimentional TiO ₂ nanostructures	10.0 Lakhs	2018-2019	UGC
Probing the Charge Transfer Mechanism in Exciplex System using lifetime Measurement	19.08 Lakhs	2019-2022	SERB
Engineering of Resilient Superhydrophobic Coating using TiO ₂ Nanostructured in combination with Ultrathin Conformal Layer of Organic Molecules	49.97 Lakhs	2019-2022	SERB
Dr. Ritesh Singh			
C-H bond Functionalization to Access Bio-relevant Scaffolds	35.0 Lakhs	2015-2020	DST
Dr. Jony Saha			
Development of Mn, Fe, Co and Ni based Ordered Mesoporous Metal Phosphate Materials and their Application as Catalysts in Electrochemical Water Oxidation	35.0 Lakhs	2017-2022	DST
Dr. Hemant Joshi			
Synthesis of Metal Complexes of Mechanically Interlocked Molecules and their Applications	35.0 Lakhs	2018-2023	DST

DEPARTMENT OF PHARMACY

DST-FIST (Level-1 category)	61.0 Lakhs	2017-2022	DST, GoI
Prof. Amit K Goyal			
Polymeric Nanostructures for Treatment of Microbial Infections	60.25 Lakhs	2019-2022	BRICS, DST, GoI
Prof. Vipin Kumar			
Isolation of Antidiabeticand Enzyme Inhibitory Constituents of Cassia Siamea	7.86 Lakhs	2017-2020	DST, GoR
Dr. Devesh M Sawant			
Design, synthesis and characterization of multifunctional platform for targeted-tumor therapy	60.89 Lakhs	2018-2021	SERB, GoI
Dr. Ruchi Malik			
Design, Synthesis and Biological Evaluations of β-Serretare Inhibitors as Anti-Alzheimer's Agents	19.84 Lakhs	2017-2019	DST-India and MSHE, Poland

ANNUAL REPORT 2019-20



Computational Studies, Synthesis and Biological Evaluation of Novel Pyrimidin-4-amine Derivatives, as Multi Targeted Kinase Inhibitors	7.68 Lakhs	2016-2019	DST , GoR
Design, Synthesis and Biological Evaluation of GSK-3 Inhibitors as Cognition Enhancers	12.0 Lakhs	2017-2019	DST-DAAD
Dr. Kaisar Raza			
Targeted, Safe and Effective Delivery of Doxorubicin to Breast Cancer Cells by Means of Strategically-Designed Folate-Tagged Phospholipid-Based Mixed Nanomicelles	32.48 Lakhs	2017-2021	DBT, India
Multi-Functional Nanomaterial Systems for Modulation of Glycosylation in Animals	31.45 Lakhs	2018-2021	DST- Nanomission
Dr. Umesh Gupta			
Dendrimer Mediated Non-Invasive Delivery of Rifampicin and Imipenem for the Effective Treatment of Pulmonary Tuberculosis	3.06 Lakhs	2016-2019	DST, GoR

SCHOOL OF COMMERCE AND MANAGEMENT

DEPARTMENT OF MANAGEMENT

Dr. Sanjay Kumar Garg			
A Comprehensive Study of Implementation of Bhamashah Yozna in the State of Rajasthan: An Empirical Analysis	7.00 Lakhs	2019-2020	IMPRESS, ICSSR
Dr. Avantika Singh			
Assessing Economic and Social Impact of Self-Help Group Movement in Rajasthan	10.00 Lakhs	2019-2020	IMPRESS, ICSSR

SCHOOL OF EARTH SCIENCES

DEPARTMENT OF ATMOSPHERIC SCIENCE

Prof. Someshwar Das			
Towards the International Collaboration to the Implementation of the Early Warning System for the South Himalayan Cloudbrust Disaster (Co-PI)	3252,000 (YEN)	2018-2020	DPRI, Kyoto University, Japan
Improvement of extreme severe storm predictability in multiple scales for mitigation of the atmospheric disasters over the North Indian subcontinent (Co-PI)	2000,000 (YEN)	2019-2020	Sumitomo Foundation, Japan
Dr. Devesh Sharma			
Water-Energy-Food Nexus Approach for Making Path of Sustainable Development Goals (SDGs) to the Country Actions	6.30 Lakhs	2017-2019	APN/IGES





Climate Change Impact Studies for Rajasthan (Area of Inland Drainage and Mahi Basin)	30.78 Lakhs	2018-2021	INCCC, MoWR
Integrated Atmospheric-Hydrological Modeling System to Assess the Impact of Climate Change on Water Resources in the Banas River Basin, Rajasthan	23.82 Lakhs	2020-2023	DST-SERB
Dr. Subrat Kumar Panda			
Investigation of Changes of Climate and its Extremes in Different Eco-Regions of India	10.0 Lakhs	2018-2020	UGC Start up
Dr. Chinmay Mallik			
Understanding atmospheric ammonia near its global hotspot region	10.0 Lakhs	2018-2020	UGC Start up
Dr. Jayanti Pal			
Recent changes in Indian Ocean dipole in response to the tropical Indian Ocean Sea surface temperature patterns and its consequences	10.0 Lakhs	2018-2020	UGC Start up

DEPARTMENT OF ENVIRONMENTAL SCIENCE

DST-FIST (Level-1 category)	80.0 Lakhs	2017-2022	DST, GoI
Dr. L. K. Sharma			
Stratified Forest Biomass Modeling using Hyperspectral Data	19.4 Lakhs	2017-2020	SAC (ISRO)
Dr. Garima Kaushik			
Design of a Microbial Process for the Removal of Organophosphorus Pesticides in Water Supplies from Rural and Urban Water Bodies	14.88 Lakhs	2016-2019	DST- CONACYT/ INT/Mexico
Dr. Shailesh Kumar Patidar			
Contamination assessment of Lanthanides in aquatic macrophytes and acid mine drainage affected plant environment of Rajasthan	10.00 Lakhs	2020-2022	UGC Start up
Dr. Nivedita Chaudhry			
Assessment of critical levels of ozone pollution on vegetation using biomonitoring as a tool	10.00 Lakhs	2020-2022	UGC Start up

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATION

Dr. Anjali Sharma			
School as a Laboratory for B.Ed. Trainees:	2.00 Lakhs	2019-2020	Inter University Centre of
A Qualitative Study			Teacher Regional Institute
			of Education, Mysuru



Fostering Scientific Creativity in the Classroom	3.15 Lakhs	2019-2021	School of Education,
through Creativity Problem Solving Instructional			Gandhigram Rural Institute,
Model (CPSIM) within Science Discipline			PMMMNMTT, MHRD
Dr. Narendra Kumar		1	
Infrastructure Facilities, Accessibility, Teacher's	3.15 Lakhs	2019-2021	School of Education,
Awareness and their Computer Self Efficacy for			Gandhigram Rural Institute,
Pedagogic Use of ICT - A Study of Government			PMMMNMTT, MHRD
Secondary Schools in Rural Areas of the District			
Ajmer (Rajasthan)			
			The state of the s

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Dr. Milan Sasmal			
3D printed microneedle for integrated drug delivery system	10.00 Lakhs	2020-2022	UGC, StartUp

SCHOOL OF LIFE SCIENCES

DEPARTMENT OF BIOCHEMISTRY

Prof. Sanjib K. Panda			
Whitefly (Bemisia tabaci) in North Eastern India. Diversity, factors of virus transmission and natural inhibitor	30.29 Lakhs	2018-2021	DBT, India
Genome and transcriptome sequencing of aromatic rices from Northeasthern regions	46.63 Lakhs	2016-2020	DBT, India
Prof. C. C. Mondal			
Interplay of metabolic and signal pathways of N-acyl dopamines and cholesterol in cancer cells	16.5 Lakhs	2017-2019	DST-RFBR (Indo-Russia)
Dr. Vishvanath Tiwari			
Designing and experimental validation of Inhibitor for RecA protein of Acinetobacter baumannii: an addition to the current antibiotics and disinfectants	28.16 Lakhs	2018-2021	SERB, India
Dr. Kiran Kumar Tejavath			
Investigating Anticancer Potential of Biosynthesized Silver Nanoparticles and Polymeric Nanoparticles Using Medicinal Plants of Rajasthan, India	45.71 Lakhs	2017-2020	SERB, India
Dr. Dipak Gayen			
Identification and functional characterization of chloroplast Clp protease from Chickpea (Cicer arietinum L.) in response to heat stress	10.00 Lakhs	sanctioned	UGC, India





Dr. Bhawana Bissa			
Understanding the molecular regulation of autophagy during breast cancer metastasis	10.00 Lakhs	sanctioned	UGC, India
Exploring the role of 'Secretary Arm of Autophagy' in Glioblastoma therapy resistance: an in vitro and patient data based study	37.84 Lakhs	sanctioned	ICMR, India
Dr. Dhaneswar Prusty			
Development of antimalarial therapeutic molecules using Plasmodium histone acetyltransferase as drug targets	10.00 Lakhs	2018-2020	UGC, India

DEPARTMENT OF BIOTECHNOLOGY

Dr. Pankaj Goyal			
How Lysophospholipids (Lysophosphatic Acid and Sphingosine -1- Phosphate) Metabolic Pathway Regulate Placental Development during Pregnancy Maintenance	50.0 Lakhs	2017-2020	DBT, India
Targeting malaria through host pathways: Dissecting the role of host serine/threonine kinase (STK35L1) in parasite infection and growth.	65.0 Lakhs	2020-2023	ICMR, India
Dr. Tarun Bhatt			
Molecular and Structural Characterization of Mitochondrial DNA Primase in Leishmania Donovani	44.21 Lakhs	2016-2020	DBT-NER
Development and Screening of Potential Anti-malarials based on Priviledged Scaffolds	6.0 Lakhs	2016-2020	DST, Rajasthan
Design, Synthesis and In silico/ in vitro Studies of Cladospori Derivatives as Potential Anti-malarial Agents (Multi-institutional with ICGEB & HCU)	25.0 Lakhs	2017-2020	DST, India
Identification and characterization of glycyl-tRNA synthetase in Leishmania donovani	29.37 Lakhs	2019-2022	DBT-NER
Dr. Suman Tapryal			-
Development of Glycoprotein E1/E2 Immunoglobulin (Ig) Chimeric Subunit Vaccine Candidates Against Chickengunya Virus in <i>E.coli</i>	34.0 Lakhs	2017-2020	DST, India
Dr. Jay Kant Yadav			
Targeting Crystallin-amyloids for the Development of Non-invasive Therapeutic Strategy for Treatment of Age-related Cataract	30.80 Lakhs	2018-2022	DST-SERB
Dr. Surendra Nimesh			
Design of a Microbial Process for the Removal of Organophosphorus Pesticides in Water Supplies from Rural and Urban Water Bodies	14.88 Lakhs	2016-2019	DST- CONACYT, INT/Mexico



Dr. Jayendra N. Shukla			
Identification of Sex-Determining Signal(S) and Sexual Differentiation Factors in the Red Flour Beetle, Tribolium Castaneum	50.00 Lakhs	2017-2020	DST-SERB
Understanding the Molecular Mechanism of Sex Determination in Yellow Fever Mosquito Aedes Aegypti	32.5 Lakhs	2017-2022	DBT

DEPARTMENT OF MICROBIOLOGY

DST-FIST (Level-1 category)	45.0 Lakhs	2016-2021	DST, GoI
Prof. Pawan K. Dadheech			
Evaluating Bioprospects of Extreme-Tolerant Cyanobacteria Inhabit Sambhar Lake of Rajasthan	8.70 Lakhs	2017-2020	DST, Rajasthan
Dr. Arvind P. Singh			
Mammalian Bladder is Not Sterile: Characterizing the Cattle (Cow) Urinary Microbiome for Understanding its Therapeutic Value	40.0 Lakhs	2017-2020	SERB-DST
Dr. Akhil Agarwal			
Mitigation of Microbial Souring in Oil Fields of Western Rajasthan	10.0 Lakhs	2017-2020	DST, Rajasthan
Development and demonstration of Biochemical Enhanced Oil Recovery (BcEOR) technology for marginal oil wells of western India	70.0 Lakhs (Total Cost 148 Lakhs)	2019-2022	IMPRINT2
Development and Scaleup of Desert Soilification technology (DST) for land reclamation in western Rajasthan	33.0 Lakhs	2019-2022	DST-SSTP
Development of Biochemical enhanced oil recovery technology for northeastern oil fields of India	30.0 Lakhs (Total cost 68 Lakhs)	2019-2022	DST-SSTP
Dr. Nidhi Pareek			
Exploration of Thermostable Chitinolytic Enzyme System from Rajasthan Area and Elucidation of Reaction Mechanism for Production of Bioactive Oligosaccharides	35.0 Lakhs	2015-2020	DST-INSPIRE, India
Integrated Biocatalytic Disintegration of Chitin Rich Biowaste for Improved Production of Bioactive Chitooligosaccharides, Glucosamine and Ethanol	41.6 Lakhs	2019-2022	DST-SERB
Dr. Vijay K. Verma			
Characterization of Membrane/Secretory Proteins in Helicobacter pylori: Mystery of Bacterial Persistent Infection (An Interphase of Host-Pathogen Interaction)	35.0 Lakhs	2017-2022	DST-Inspire
Identification and Functional Characterization of Novel Membrane/Secretory Proteins in Helicobacter pylori Responsible for Host-pathogen Cross Talk and Pathogenesis	10.0 Lakhs	2017-2019	UGC-StartUp
	A contract of the contract of	4.78a	



Dr. Deeksha Tripathi			
Identifying the role of MIP in activating host innate immune response for development of new intervention strategy to combat Tuberculosis.	55.0 Lakhs	2019-2022	DBT Biocare Grant

SCHOOL OF MATHEMATICS, STATISTICS AND COMPUTATIONAL SCIENCES

DEPARTMENT OF MATHEMATICS

Prof. J. K. Prajapat			
Investigation of Certain Open Problems in Planar Harmonic Mappings	6.6 Lakhs	2018	SERB-MATRIX
Dr. Anand Kumar			
A Study of Entropy Generation in Ducts	3.85 Lakhs	2019	National Project Implementation Unit, MHRD
Dr. Amit Chakraborty			
Mathematical and Computational Modelling of below Ground Nitrogen Biogeochemical Pathways using Systems Biology Approaches	21.14 Lakhs	2018-2021	DST-SERB
Dr. Ram Kishor			
Libration Orbits Mission Design with Perturbations	10.0 Lakhs	201 7- 2019	UGC
Dr. Jai Prakash Tripathi			
Mathematical Modelling of the Biological Control Problems: Non-chemical methods in Population and Disease control	18.12 Lakhs	2018-2021	DST-SERB
$Spatiotemporal\ modelling\ of\ Schistosomias is\ transmission\ and$	10.0 Lakhs	2018-2019	UGC
control under various demographic and seasonal environments			
Dr. Vipul Kakkar			
Doubly Transitive Groups and Generalized Near-Domains	10.0 Lakhs	2018-2019	UGC
Dr. Ram Kishor			
Fuzzy Modeling of Tolerance Automata and Rough Automata	10.0 Lakhs	2018-2019	UGC

DEPARTMENT OF STATISTICS

Dr. Arvind Pandey			
Modeling Frailty for Bivariate Survival Data Based on	10.0 Lakhs	2018-2020	UGC
Reversed Hazard RateModeling Frailty for Survival Data			
Dr. Arvind Pandey			
Modeling Frailty for Bivariate Survival Data Based	10.0 Lakhs	2018-2020	UGC
on Reversed Hazard Rate			
Modeling Frailty for Survival Data	9.76 Lakhs	2018-2020	SERB
Dr. Deepesh Bhati			
Generation of Statistical Models using Concatenation	17.97 Lakhs	2019-2022	SERB



DEPARTMENT OF COMPUTER SCIENCE

Dr. A. Nagaraju			
Efficient Resource Allocation in Cloud Environment	34.0 Lakhs	2015-2020	DietY
Mr. Gaurav Meena			
Securing the Smart Cities with Internet of Things (IoT) and Blockchain	7.0 Lakhs	2019-2020	DST/ICPS
Deep Learning in Image Processing and Pattern Recognition	9.0 Lakhs	2020-2021	DST/ICPS

SCHOOL OF PHYSICAL SCIENCES

DEPARTMENT OF PHYSICS

Prof. Manish Dev Shrimali			
Multistability and Hidden Attractors in Dynamical Systems	66.33 Lakhs	2019-2021	DST-RSF
Explosive Oscillation Suppression in Coupled Nonlinear Oscillators	20.79 Lakhs	2017-2020	DST-SERB
Dr. Ajit K. Patra			
Probing electronic structure of Cobaltite thin films	6.89 Lakhs	2017-2020	UGC-DAE
Magnetic and spectral properties of novel Mn based Heusler alloys for magnetoelectronics applications	33.19 Lakhs	2019-2022	DST-RFBR
Dr. Neeraj Panwar			1
Size Dependent Magnetic Properties of Mn Doped Rare Earth Orthochromites: A Neutron Power Diffraction Study (CRS-M-298)	7.15 Lakhs	2018-2020	UGC-DAE CSR MUMBAI
Impact of Ion Irradiation on the Exchanges Bias, Mahnetization Reveral Spin Reorientation and Magnetocaloric	6.25 Lakhs	2018-2021	IUAC, New Delhi
Exploring the Magnetocaloric Properties of Bulk Ceramics, Nanocrystalline and Thin Film of Manganese Doped Rare Earth Orthochromites	44.26 Lakhs	2018-2021	DST New Delhi
Dr. Brijesh K. Singh			
Generation and Characterization of Super-Oscillatory Vector Beams	10.00 Lakhs	2017-2019	UGC
Development and characterization of polarization base pupil function for the generation of laser beam having far field subwavelength focal spot	33.19 Lakhs	2020-2023	SERB
Dr. Sahinur Reja	'		
Quantum criticality and exotic magnetic states in spin tetramer compounds	10.00 Lakhs	2020-2021	UGC
Dr. Yugandhar Bitla	1		
Development of epitaxial Ferroelectric and transparent conducting oxides based on van der Waals heteroepitaxy	10.00 Lakhs	2020-2021	UGC





Dr. Sandeep Kumar			
Electric field controlled magnetism in InAs	18.19 Lakhs	2017-2020	SERB-DST
semiconductor nanowires			

SCHOOL OF SOCIAL SCIENCES

DEPARTMENT OF CULTURE AND MEDIA STUDIES

Dr. Nikolas Lakra			
A three-day National workshop on 'Application of Artificial Intelligence for Conservation of Cultural Heritage of India'	7.0 Lakhs	2019-2022	DST

DEPARTMENT OF ENGLISH

Dr. Sanjay Arora			
'English Skills for Employability: Empowering Engineering	15.98 Lakhs	2019-2020	TEQIP
Students of Rajasthan in a Globalised World' (Co-PI)			(through AICTE)

DEPARTMENT OF HINDI

Prof. N. Lakshmi Aiyar			
The modern philosophers of Tamil Nadu: A comprehensive study	2.0 Lakhs	2019	ICPR, New Delhi

DEPARTMENT OF PUBLIC POLICY, LAW AND GOVERNANCE

Dr. Gyana Ranjan Panda			
Assessment of Policy Priorities for Low Carbon Economy in India	8.5 Lakhs	2015-2019	UGC-MRP
The Comparative Study of International Political Economy Perspectives of Financing the Clean Energy Sector in Selected Countries (India, China and Brazil)	20.0 Lakhs	2016-2019	ICSSR
Legislative Policy-Making on Climate Justice in India: The Study of Parliamentary Bussinesses, Practices and Oversights since Thirteen Lok Sabha	6.0 Lakhs	2019-2021	ICSSR- IMPRESS
Dr. C. Jeevan Kumar			
Digital Governance in India: A Case Study of Rajasthan with reference to Digital India Programme	6.50 Lakhs	2018-2020	ICSSR

DEPARTMENT OF SOCIAL WORKS

Dr Shaizy Ahmed			
Unheard Voices of Silent Growing Majority:	7.26 Lakhs	201 7 -2020	NHRC,
An assessment of Social Security and health risk among			New Delhi
women migrant workers of Rajasthan			



SCHOOL OF SPORTS SCIENCES MYAS-CURAJ

Dr. Neha Singh				
Gene Expression studies of the skeletal muscle repair pathway induced by Prosopis cineraria	10.00 Lakhs	2020-2022	UGC Start up	
Dr. Hemanth Naick B				
The Potential role of miR-181-c in chronic traumatic encephalopathy	10.00 Lakhs	2020-2022	UGC Start up	
Inter-organelle association of endoplasmic reticulum – mitochondria association and its role in replication stress and other cellular physiology and pathophysiology	35.0 Lakhs	2020-2025	DST Inspire	



Theses and Dissertations

The students in various departments of the University submit a thesis and dissertation towards the completion of their postgraduate and Ph.D. degree. This chapter contains the list of Ph.D., M.A., M.Arch, MBA, M.Com, M.Sc., M.Tech Thesis and dissertation completed by students under the guidance of their respective supervisors. The following list contains the details of the students thesis and dissertations.

PH.D. THESES

Candidate Name	Department	Research Supervisor(s)	Thesis Title	Date of Viva-Voce
Ms. Kanika Jain (2013PHDCH04)	Chemistry	Dr. Raghu Chitta	Design and Study of Multichromophoric Porphyrin Systems for Solar Energy Harvesting	1st July 2019
Mr. Abhishek Pareek (2014PHDCH001)	Chemistry	Dr. Srinivasarao Yaragorla (RS) Dr. M. Bhanuchandra (JS)	Alkyne Tethered Regioselective Inter & Intra-molecular Cyclization Reactions towards the Biological Interesting Heterocyclic Molecules	1st July 2019
Ms. Geeta Sahu (2014PHDCMS01)	Culture and Media Studies	Dr. Nicholas Lakra	Media Representation of Nomadic Tribes: A Socio-Cultural Study in Rajasthan	8th July 2019
Mr. Armendra Amar (2013PHDCMS01	Culture and Media Studies	Dr. Neeru Prasad	An Analysis of Reflect- Effect Studies of Media on Society: A Case Study of Bhopal Gas Tragedy	29th July 2019
Ms. Aparna Ajith (2014PHDEN02)	English	Dr. Bhumika Sharma	Cultural Cartography in the Fiction of Munsshi Premchand and Thakazhi Sivasankara Pillai	7th August 2019
Ms. Garima Sharma (2012PHDES03)	Environmental Science	Dr. Dr. L.K. Sharma (RS) Prof. K.C. Sharma (JS)	Assessment of soil carbon Stock and its relation to land use patterns and climatic variability in Semi-arid Region of Rajasthan	19th August 2019
Ms. Sarita Gupta (2013PHDMBΛ01)	Management	Dr. Sanjay Kumar	Determinants Influencing Indian Reverse Mortgage Market: An Empirical Analysis	26th August 2019

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				sellmen
Mr. Ramovatar (2014PHDPH005)	Physics	Dr. Neeraj Panwar	Studies on the dielectric, ferroelectric, piezoelectric and optical properties of barium titanate based lead – free ceramics	27th August 2019
Mr. Ramdas Shivaji Pathare (2014PHDCH006)	Chemistry	Dr. Devesh M. Sawant	Exploration of Transition - Metal Catalysed Synthetic routes for the generation of Biologically Significant Heterocyclic Molecules	
Ms. Nisha Rathore (2012PHDMBA01)	Managemment	Dr. Avantika Singh	Determinants and Outcomes of Ethical Leadership for Managing Human Resources in Higher Education in Rajasthan	09th September 2019
Ms. Drista Sharma (2014PHDBT001)	Biotechnology	Dr. Tarun Kumar Bhatt	In-Silico Molecular Docking Analysis and Simulation Studies on Apicoplast Proteins of Malaria Parasite	09th September 2019
Mr. Sarvesh Kumar Mishra (2013PHDHINDI05)	Hindi	Dr. Jitendra Kumar Singh	काशीनाथ सिंह के उपन्यासों में समसामयिक यथार्थबोध	26th September 2019
Ms. Anusuya Mehra (2013PHDMBA02)	Managemment	Dr. Tulsee Giri Goswami	Organizational Culture and Employee Performance: Role of Moderators in Public and Private Banks in Rajasthan	27th September 2019
Mr. Aman Deep Singh (2014PHDEN01)	English	Dr. Sanjay Arora	Ontological and Epistemological Discourses in Select Works of Kurt Vonnegut and Thomas Pynchon	18th October 2019
Mr. Varun Agiwal (2015PHDSTA04)	Statistics	Dr. Jitendra Kumar	Analysis Of Structural Break(S) In Time Series Model: A Bayesian Perspective	25th October 2019
Ms. Priyanka Chhaparwal (2014PHDSTA01)	Statistics	Dr. Sanjay Kuma	Robust Modified Estimators Of Population Parameter(S) Usingauxiliary Information Under Non-Normality	30th October 2019





Ms. Shalini Gour Structural and Functional 30th October 2019 Biotechnology Dr. Jay Kant Yadav (2014PHDBT008) Determinants of Amyloids derived from Antimicrobial Peptides (AMPs) Microbial mediated metal 31th October 2019 Ms. Neha Nagar Microbiology Dr. C.S. Gahan (2016PHDMB01) leaching from petroleum refinery spent catalyst and copper slag Dr. C.S. Gahan Bio-catalyzed leaching of 1st November Ms. Himanshi Microbiology (2015PHDMB03) waste mobile phone 2019 printed circuit board and zinc sulphide concentrate Mr. Swatantra Kumar Environmental Dr. Devesh Sharma Impact Of Climate 1st November Science Change On Water And 2019 Dubey (2013PHDES04) Food Security In Banas River Basin Of Rajasthan Mr. Suresh Chandra Environmental Dr. Devesh Sharma Understanding the 4th November Linkage of Urbanization, 2019 (2012PHDES04) Science Land Surface Temperature and Human Health- A Case of Jaipur City of Rajasthan, India 18th December Mr. Vijay Kumar Biotechnology Dr. Jay Kant Yadav Aggregation Behaviour of Semen-derived 2019 (2013PHDBT05) Amyloidogenic Peptides and Assessment of their Effect on Human Sperm Ms. Nisha Bhardwaj Microbiology Prof. Pradeep Verma Production. 22th January 2020 (2014PHDMB05) Characterization and Application of Xylanases from Aspergillusoryzae in Generating Ethanol Computer Dr. Mamta Rani 06th February Mr. Ketan [ha Noise in fractal models 2020 (2013PHDCS03) Science Ms. KiranYadav Physics Prof. Manish Dev Oscillation Suppression 20th February (2014PHDPH002) Shrimali and Controlling 2020 Multistability in **Dynamical Systems** Dr. Bhumika Sharam Ms. BidishaKantha English Virgins and Vamps: A 24th February Study of Female Gaze 2020 (2015PHDEN01) through the Select Works of Devdutt Pattanaik and Kavita Kane

ANNUAL REPORT 2019-20



Mr. Arpit Sidhu	Commerce	Dr. Neha Seth	Long-term Relationship and Volatility Spillover: An Empirical Study of Indian Commodity Market	28th February 2020
Mr. Rajan Kumar Pandey (2014PHDBC04)	Biochemistry	Dr. Vijay Kumar Prajapati	Febrifugine Dihydrochloride As A New Chemotherapeutic Agent Against Visceral Leishmaniasis Infection	2nd March 2020
Mr. Saurabh Kumar (2013PHDSTA02)	Statistics	Dr. Jitendra Kumar	A Study Of Large Size Time Series Analysis In Reference To Big Data And Outlier	03th March 2020
Mr. Aashish Kumar Mishra (2014PHDHINDI01)	Hindi	Dr. Jitendra Singh	नयी कहानी और कथालोचना के प्रतिमान	12th March 2020
Ms. Tanu Sharma	Biochemistry	Dr. Chandi C Mandal	Investigation of the effect of omega-3 fatty acids in osteoblast – like differentiation of breast cancer cells and microcalcification	18th June 2020

(RS – Research Supervisor; JS – Joint Supervisor)

DISSERTATIONS

DEPARTMENT OF ARCHITECTURE

Candidate Name	Title of the Dissertation	Supervisor Name	Design Thesis	Supervisor Name
Akshay Gupta	Comparative Analysis of Daylight Compliance Methods of Green Building Codes	Ar. Sunil Sharma	Eco-Resort at Chandubi Lake, Assam	AR. Vidhu Bansal
Aman Kumar	Resilience Analysis of Centralized And Decentralized Waste Water Treatment Systems in Case of Hilly Terrain	Ar. Ritu B. Rai & Ar. Sunny Bansal	Indian institute of Information Technology, Pune	Prof. Neeraj Gupta





Arsha Gitty George	Effect of Instructional Space Design on Students' Performance - Case of Rajasthan and Kerala	Prof. Neeraj Gupta & Ar. Vidhu Bansal	Bio 360 Life Science Park, Trivandrum	Ar. Ritu B. Rai
Garima Agarwal	Analyzing Parks of Lucknow Based on Functionality and Aesthetics	Ar. Ritu B. Rai & Ar. Sunny Bansal	Ambedkar University, Rohini, Delhi	Prof. Neeraj Gupta
Diksha Bharti	Impact of Indoor Plants in Air Conditioned Office Spaces: An Assessment of User's Perception	Prof. Neeraj & Ar. Vidhu Bansal	Atal Bihari Vajpayee Medical University, Lucknow	Prof. Neeraj Gupta
Matsushita Sharma	Solid Waste Management in Tourist Towns of Rajasthan	Prof. Neeraj Gupta & Ar. Sunny Bansal	Infosys campus, Nagpur	Prof. Neeraj Gupta
Praveen Rohilla	Framework for Social and Cultural Aspects in Indian Green Building Rating Systems	, ·	Lake View Office Complex, Trilokpuri, New Delhi	Prof. Neeraj Gupta & Ar. Sunny Bansal
Pooja Arora	Strategies for Redevelopment of Historic Ceremonial Axis, Mahal, Nagpur	Ar. Ritu B. Rai Ar. Vidhu Bansal	Indian Institute of Management Campus, Nagpur	Prof. Neeraj Gupta
Saranya Divakaran PC	Flood Resilient Sustainable Building Construction and Adaptation of Sinking Island (Muroe Island) in Kerala	Ar. Ritu B. Rai & Ar. Vidhu Bansal	International Research Institute of Ayurveda; Kannur	Ar. Ritu B. Rai
Silvi ∫hangra	Revival of Traditional Water Harvesting Systems: Study of Stepwells	Ar. Ritu B. Rai & Ar. Vidhu Bansal	Heritage Eco-Resort, Achrol, Jaipur	Ar. Vidhu Bansal
Shefali Rashi	The Importance of Formal and Informal Open Public Spaces in Educational Campus for Social Connectivity		Information Technology Park, Mohan Nagpur Maharashtra	Ar. Sunny Bansal
Tushar Kolhe	Glasses Affecting Energy Consumption of an Office Building in Composite Climate of Jaipur, Rajasthan	Ar. Sunil Sharma	Affordable Housing, Mumbai	Ar. Ritu B. Rai



DEPARTMENT OF ATMOSPHERIC SCIENCE

Candidate Name	Title of the Dissertation	Supervisor Name
Ankit Patel	Decadal Changes in Global Atmospheric Carbon Monoxide	Dr. Chinmay Mallik
Ashish Ranjan	Climatological Study of Lightning over India and Simulation of Two Lightning Cases using WRF Model	Dr. Subrat Kumar Panda
Musaid P. P.	Understanding Thunderstorm Frequency in India and A Study on 2019 Pre-Monsoon Severe Weather Events Over Jamshedpur Using WRF Model	Prof. Someshwar Das
Sanjukta Ghosh	Impact of Vertical Resolution in the Planetary Boundary Layer and Land-surface Processes Parameterization on the Simulation of Fog over Delhi	Prof. Someshwar Das
Saswat Dash	Sensitivity of Planetary Boundary Layer Schemes in Simulation of Heat Waves over Rajasthan in a Regional Climate Model Framework	Dr. Subrat Kumar Panda
Sohan Pal Meena	Sensitivity Study of Cumulus Parameterization in Simulating Cyclone "Bulbul" using WRF	Dr. Jayanti Pal
Suman Saurabh	Simulation of Heavy Rainfall EventOver North-Bihar Using Wrf Model	Dr. Devesh Sharma
Sumitra Sharma	Spatial-Temporal Variability of Climate Extremes and Drought Indices over Mahi and Inland River Basins of Rajasthan	Dr. Devesh Sharma
Vinay	Retrieval of Rainfall From DWR Data and Verification using The Gauge and GPM Satellite Data over Rajasthan	Dr. Jayanti Pal

DEPARTMENT OF BIOCHEMISTRY

Candidate Name	Title of the Dissertation	Supervisor Name
Amarjeet Shrama	Evaluating the Effect of Fruit Extracts on the Osteogenic Potential of Breast Cancer Cells	Prof Chandi C Mandal
Anukrati Arya	Designing of Hybrid Antibiotic against Penicillin Binding Protein-3 of Acinetobacter Baumannii	Dr. Vishvanath Tiwari
Basumitra	Investigating the effects of Doxycycline gold nanoparticles on autophagy gene expression	Dr. Bhawana Bissa
Diksha Lalwani	Genome-wide analysis of 9- cis epoxycarotenoid dioxygenase (need) gene in Vigna radiata (moong beans)	Prof. Sanjib K. Panda
Durgesh Meena	Transcriptional regulation of autophagy gene expression	Dr. Bhawana Bissa
Garima Devmurari	Assessment of cultivable bacterial diversity and screening of Nitroaromatic compounds degrading bacteria in sample collected from Sanganer	Dr. Shiv Swaroop





Ishita De	Role of Autophagy genes in Cancer progression	Dr. Bhawana Bissa
Karminder Kaur	Evaluation of in vitro antioxidant and antidiabetic potential of bauhinia purpurea flowers	Dr. Kiran Kumar Tejavath
Lekh Raj	Assessment of Hydrolytic Enzyme Activity and Antibiotic Resistance Property of Haloalkaliphilic Bacteria Isolated from Sambhar Lake, Rajasthan	Dr. Shiv Swaroop
Mandeep Burra	Identification of putative rlk genes in Pennisetum glaucum	Prof. Sanjib K. Panda
Nandita Bagarhatta	Assessment of antimicrobial activity of milk derived exosomes against Acinetobacter baumannii	Dr. Vishvanath Tiwari
Nitisha Meena	Assessment of cultivable bacterial diversity and screening of C1compunds degrading bacteria in sample collected from Sanganer	Dr. Shiv Swaroop
Nishu Meena	Structural modeling of an unknown zinc finger protein (ZNFp) and its expression pattern in various cancer cell lines	Prof. Chandi C Mandal
Priyanshi	Searching for Anti-cancer Potential In Various Wild Plants	Prof Chandi C Mandal
Priya Chouhan	Anti-IL-10 antibody humanization by SDR grafting with enhanced affinity to neutralize the adverse response of interleukin-10	Dr. Vijay Kumar Prajapati
Priyakshi Singh	Surface functionalization of selenium nanoparticles with anticancer drug and it's efficacy	Dr. Kiran Kumar Tejavath
Rajesh Choudhary	Role of cytochrome b6f in chloroplast biogenesis under stress condition	Dr. Dipak Gayen
Rajveer Singh Shekhawat	Statistical and Experimental Approaches to Endorse the Link between Cancer and Obesity in Male Population	Prof. Chandi C Mandal
Renu Choudhary	High throughput virtual screening, ADMET Prediction, and Binding energy estimation to discover some common small molecule inhibitors against Immune checkpoints	Dr. Vijay Kumar Prajapati
Richa Joshi	Novel Anti-Biofilm Molecule Targeting Quorum Sensing of Acinetobacter baumannii	Dr. Vishvanath Tiwari
Sakita Rapria	Genome-wide analysis of laccase in Pennisetum glaucum	Prof. Sanjib K. Panda
Samridhi Agarwal	Genome-wide analysis of fluoride exportin gene in plants.	Prof. Sanjib K. Panda
Satyendra Singh	Identification of antiviral inhibitors against SARS-CoV-2 helicase (NSP13)using high throughput virtual screening	Dr. Dhaneswar Prusty
Sharmistha Dey	Role of Mitochondrial ATPase in response to stress	Dr. Dipak Gayen
Sunil Haritwal	Identification of protein targets of anti-leishmanial compounds derived from Medicines for Malaria venture by using in silico methods	Dr. Dhaneswar Prusty
Vikram Beda	The unfolded protein response: role of endoplasmic reticulum to elevate abiotic stress in plant	Dr. Dipak Gayen
The Standard of the Control of the C		



Vinita Sharma	Immunoglobulin Interface Redesigning to Enhance Lebrikizumab Mediated Immunomodulation of IL-13 Hyper-response	Dr. Vijay Kumar Prajapati
Vishal kheniwal	In silico approach of drug repurposing of FDA approved drugs for the development of new antimalarial compounds	Dr. Dhaneswar Prusty

DEPARTMENT OF BIOTECHNOLOGY

Candidate Name	Title of the Dissertation	Supervisor Name
Aditi Siddha	Preparation and Characterisation of Gentamicin Capped Silver Nanoparticles	Dr. S. Nimesh
Anita	An immunoinformatics approach to design multi-epitope subunit vaccine for malaria	Dr. T.K. Bhatt
Arjun Sankhla	Identification and Characterisation of Drosophila intersex homologue in the red flour beetle, Tribolium castaneum	Dr. J. N. Shukla
Ashwani Kumari	Heat induced aggregation of soluble protein isolated from cataract eye lens	Dr. J. K. Yadav
Asuru Tejeswara Rao	Identification and characterization of a novel sumo protease gene from Tomato	Prof. A. K. Gupta
Bandita Rout	In silico Prediction of Aggregation Propensity of Major Egg Proteins and In vitro Investigation of Amyloid-like Structures in Hen Egg White	Dr. J. K. Yadav
Chitra Togra	Subcloning of chimeric protein glycoprotein D- μ-CH3-CH4 in yeast pPICZα vector for expression in Pichia pastoris	Dr. S. Tapryal
Himanshu	Temperature dependent molecular dynamic simulation of protein-ligand complexes	Dr. T.K Bhatt
Krishan Gourav Behera	Identification of a novel SUMO protease gene that participates in drought responses in <i>Cicer arietinum</i>	Dr. Vivek Verma
KSG Gowhith	Assessing the effects of dying cells of the same and other bacterial species on biofilm formation by Bacillus subtilis.	
Laxman Ram	Effect of Trehalose on Heat induced Aggregation of Soluble Protein, Isolated from Human Cataractous lens	Dr. J. K. Yadav
Muktesh Kumar Sahu	Development and Characterization of STK35L1 mutant cell lines using CRISPR/Cas9 technology	Dr. P. Goyal
Nidhi Godara	Role of Lysophosphatidic acid in extravillous trophoblast cell migration	Dr. P. Goyal
Nirupa Chaurasia	Identification and expression analysis of SUMO homologue in the red flour beetle, Tribolium castaneum	Dr. J. N. Shukla
Nishu Kaushik	Elucidation a potential role of SUMOylation in cytokinin signalling	Dr. Vivek Verma





Prerna Singh	Cloning and Preliminary Characterization of Full-Length TasA, a vital protein involved in biofilm formation by Bacillus subtilis	Dr. J. Pandey
Rinku Yadav	Subcloning of glycoprotein D of HSV-2 in yeast pPICZα vector for expression in Pichia pastoris	Dr. S. Tapryal
Shivam Sahu	Synthesis and Characterization of Polyethylenimine Capped Silver Nanoparticles	Dr. S. Nimesh

DEPARTMENT OF CHEMISTRY

Candidate Name	Title of the Dissertation	Supervisor Name
Anand Mohan Bhargav	A Synthetic route to diazepinones from Morita-Baylis-Hillman Ketones	Dr. Easwar S.
Anuradha Dixit	Design and Synthesis of Macrocyclic Molecular Machines	Dr. Hemant Joshi
Ayushi Yadav	Metal Free Synthesis of Congested and Functionalized Amines using Aza-oxyallyl Cation as a Key intermediate	Dr. Ritesh Singh
Bharat Kaushik	Study the Intermolecular Electron and Energy Transfer between Core-Shell Quantum Dots and 2-(4-aminophenyl)-N-cyclohexylimidazo [1,2-a]pyrazine-3-amine	Dr. Partha Roy
Churchil Sharma	Design of a Proline Based Bifunctional Squaramide Catalyst for Asymmetric Transformations	Dr. Easwar S.
Deepak Kumar	Synthesis of Pyrene Substituted Titanium(IV) Carboxylates	Dr. Thirumoorthi R
Deepak Kumar	Doping of metal/nonmetal into TiO2 nanostructure	Dr. Partha Roy
Garima Sharma	KOH Mediated SNAr Reaction of Dibenzothiophene-5,5-dioxide: Scope of 2-Aryl Phenol Synthesis	Dr. M. Bhanuchandra
Guddan Dhakar	Method and Strategies for the Synthesizing of TiSe2 Nanostructure	Dr. Partha Roy
Gyan Chand Bhandari	Design and Synthesis of Ruthenium Complex of SeNSe Pincer Ligand and their Applications in Catalysis	Dr. Hemant Joshi
Himanshi	Design and Syntheses of Secondary Interactions Controlled Molecular Rotors	Dr. Hemant Joshi
Hitesh Ch. Das	Iron-Catalyzed Multicomponent Synthesis of Oxazole	Dr. Chandrakanta Dash
Indu Meena	Synthesis of mesoporous carbon by single step oxidation and their electrocatalytic activities for water splitting	Dr. Jony Saha
Jitendra Gadwal	Design and Syntheses of Macrocyclic Metal Complexes of Organo-sclenium Ligands	Dr. Hemant Joshi
Kalluri Rambabu	Transition-Metal Free One Pot Synthesis Of Dihydropyrazoles From Propagylic Alcoholes And Arylhydrazines	Dr. M. Bhanuchandra

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Karan Singh Yadav	Transition Metal free C-C coupling of 2-phenylH-imidazo [1,2-a]pyridine via direct C-II bond Functionalization	Dr. Vijay Kumar Prajapati
Manjali Nautiyal	Intermolecular C-II Bond Amination in Heteroarenes at Room Temperature	Dr. Ritesh Singh
Manvi Mukta Arya	Rapid Access to 1,4-benzodiazepine-3,5-dione and Benzoxadiazocine derivatives using α-haloamides	Dr. Ritesh Singh
Monika	Synthesis of 4-H-benzo [4,5] thiazolo [3,2-a] pyrimidines from Morita-Baylis-Hillman Ketones	Dr. Easwar S.
Pragya Poonia	Half sandwich Ruthenium Complexes: Synthesis, Characterization and Catalytic Activity	Dr. Anuj K. Sharma
Ravi Kumar Choudhary	Electrochemical Water oxidation by Ru-Se based molecular complex	Dr. Jony Saha
Rohit Samanta	Design, synthesis and evaluation of BSA binding properties of ruthenium arene complexes	Dr. Anuj K. Sharma
Sanjeeb Kumar Ojha	Synthesis and Characterization of Bimetallic Complexes Supported by Naphthyridine Functionalized Mono-pyrrole ligand	Dr. Chandrakanta Dash
Shankar Lal Saini	Effect of pH & Temperature on Formation of TiO2 nanoparticles via sol-gel method	Dr. Partha Roy
Shivani Singh	Synthesis and Characteriztion of Organosilicon or Organotin Coordinated Coumarin-3-carboxylates	Dr. Thirumoorthi R
Sikandar Gurjar	Pyrrolyl-Pyridine based ligand: Synthesis and their Characterization	Dr. Chandrakanta Dash
Sudhir Muduli	Facile Preparation of Peripheral Substituted Dibenzoheterocycle: Investigation of the effects of heterocycles on the Photophysical Properties	Dr. M. Bhanuchandra
Sudipta Chakraborty	Synthesis, Characterization and Spectroscopic studies of Azo based ligands for the Treatment of Alzheimer's disease.	Dr. Anuj K. Sharma
Suman Kumar Saha	Trapping of 1-Methylnaphthalene Radical by TEMPO	Dr. Thirumoorthi R
Vikas Jakhad	Electrocatalysis of Oxidized Charcoal supported NiFe layered double hydroxide for Oxygen Evolution Reaction	Dr. Jony Saha

DEPARTMENT OF COMMERCE

Candidate Name	Title of the Dissertation	Supervisor Name
Aditya Chaturvedi	Need for Cyber-squatting Law: A Case Study of Indian Companies	Prof. Praveen Sahu
Aruna Giri	A Study of Attributes of Mobile Phones with respect to the Utilities and Services: With Reference to Central University of Rajasthan	Prof. Praveen Sahu





Mohanlal Jangid	Implementation of Supply Chain Financing and Financial Performance of User Firm: A Case Study of AGCO Corporation	Dr. Sanjay Kumar Patel
Riidhi Jain	Online Education System (A New Pedagogical Approach) of India: From the Learner's Point of View	Dr. Sushila Kumari Soriya
Sachchi Guru	Waste Management Startup and Financial Opportunities	Dr. Sanjay Kumar Patel
Shubham Pandey	Industrial Development of Rural Rajasthan: An Empirical Study of SSI and Indigenous Industries	Dr. Sanjay Kumar Patel
Subhadra Rajpurohit	Impact of Algorithmic Management on Online Food Delivery Business With Special Reference to Swiggy And Zomato	Dr. Sushila Kumari Soriya
Vandana Kumari	A Study of Rural Marketing Strategies of FMCG: With Special Reference of HUL and Dabur Indian Limited.	Prof. Praveen Sahu
Vishnu Vaishnav	Implementation of Digitalization in MSMEs: A Case Study of Rajasthan	Dr. Sushila Kumari Soriya

DEPARTMENT OF COMPUTER SCIENCE

Candidate Name	Title of the Dissertation	Supervisor Name
Akash Choudhary	Video Captioning with Λdversarial learning	Mr. Raviraj Choudhary
Kumar Shikhar	Quora Question pair similarity	Dr. Krishna Kumar Mohbey
Nilesh Sharma	PlayMath by Vikalp India	Mr. Gaurav Meena
Rahul Sain	Crime data analysis and predicting total crime rate	Dr. Muzzammil Hussain
Ronit Kumar	Human activity recognition by ML	Dr. Muzzammil Hussain
Shahuza Abdul Kareem	Comparison of different datasets for image generation using GAN	Dr. Krishna Kumar Mohbey
Somesh Choudhary	Abnormality detection in MusculoskeletalRadiograph	Mr. Raviraj Choudhary
Ujjal Kumar Maity	MacLearn: An Automated software for Machine Learning	Dr. Nistha Kesswani

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Candidate Name	Title of the Dissertation	Supervisor Name
Arpita Patidar	Serving While Attacked: DDoS Attack Effect Minimization Using Page Separation and Resource Allocation Strategy	Dr. Gaurav Somani; Mr. Ravi Saharan (JS)
Karishma Yadav	A Lightweight Multi binding authentication mechanism between communicating nodes in client-Server Environment	Dr. M. Hussain
Prantik Panja	Detection of Advanced Persistent Threat (APT) Through Trusted Process list and Log-Based Event Monitoring	Dr. Gaurav Somani Mr. Ravi Saharan (JS)



Roli Dikshit	Vulnerability of Baptista type chaotic cryptosystem	Dr. Mamta Rani
Ruchi	IIandling Tail Labels in Multi Label Classification with Data Augmentation and Self Training	Dr. Manas Patra
Sayan Saha Roy	Eigen Trust Factor based Virtual Machine allocation Policy to defend Co-Resident attack in Cloud Computing Environment	Dr. A. Nagaraju

DEPARTMENT OF CULTURE MEDIA AND STUDIES (PG Diploma in Media writing and digital communication)

Candidate Name	Title of the Dissertation	Supervisor Name
Hemant Kumar Jayas	Role of Media in Villages During Pandemic	Prof. Subhash Dhuliya
Navnit Kumar	Digital Literacy programme in India	Dr Neeru Prasad
Niranjan Singh	Preference of Content in Magazines Among Young Girls: A Study of Vogue & Femina'	Prof. Subhash Dhuliya
Prateek Kumar Vishwakarma	Infodemic and Pandemic: A study on fake news related to COVID-19	Dr Pranta Pratik Patnaik
Tarushi Agrawal	News consumption by people during Covid-19	Prof. Subhash Dhuliya
Vishwajeet Ranjan	Critical study on fake stories in social media and its impact	Dr Nicholas Lakra

DEPARTMENT OF DATA SCIENCE AND ANALYTICS

Candidate Name	Title of the Dissertation	Supervisor Name
Abhishek Chand	Blinking Light Detection	Dr. Vikas Kumar
Abhishek Kumar	Food Recognition API Development	Dr. Upasana Talukdar
Aishwarya Verma	AI Enabled Career Planning and HR Assistance Tool	Dr. Vikas Kumar
Anamika Anurag	Compliance Analytics	Dr. Vikas Kumar
Ankit Singh	Video Analysis & Smart Advertisement Solution Using AI& Vision	Dr. Upasana Talukdar
Anurag Sharma	Anti-Money Laundering and Fraud Detection	Dr. Upasana Talukdar
Atul Joshi	Marketing Analytics: Data Science in Digital Marketing	Dr. Upasana Talukdar
Arkaprabha Majumdar	Absolute Win Loss	Dr. Upasana Talukdar
Bimal Kumar	Lightgbm For Prediction of Nox Emission from Thermal Power Plant	Dr. ManasPatra
Divya Kumari	Social Media Data Extraction for Risk Analytics and Merchant Fraud Detection	Dr. Vikas Kumar
Ipsita Patnaik	Improving Alert Review and Clearance by Extensive Data Cleaning and Validation	Dr. Upasana Talukdar





Nitesh Sukhwani	Intelligent Data Capture and Control	Dr. Vikas Kumar
Pawan Bisht	Enhancing Recruitment Process with Data Science	Dr. Vikas Kumar
Pradyumna Kumar	Handling Tail-Label Problems in Multi-Label	Dr. Manas Patra &
Sahoo	Classification using In-Situ Synthetic Data Generation	Dr. Vikas Kumar
Priya Sinha	Value-At-Risk (Var)Risk Analytics Accelator	Dr. Upasana Talukdar
Sumit Kumar	Hair Segmentation Cum Hairstyle Recommender System	Dr. Upasana Talukdar
Suman Saurav	Win/Loss Analysis in Banking Sector	Dr. Vikas Kumar
Vivek Shukla	Social Media Analytics	Dr. Vikas Kumar

DEPARTMENT OF ECONOMICS

Candidate Name	Title of the Dissertation	Supervisor Name
Aakanksha	Determinants of gender preferences in fertility: A study of major states in India	Dr. Pragati Jain
Aamna Nissa Khan	An analysis of consumption pattern of north and south india	Dr. Satyanarayana Murthy Dogga
Amresh Kumar	The role of the RBI in Indian Economy and for Establishing Stability in the Economy	Dr. Pramod Kumar Naik
Anshu Mehra	Impact of Public Debt on growth among Indian states: A study of pre and post FRL act	Dr. Satyanarayana Murthy Dogga
Archana	The Impact of unemployment on Economic growth in India	Dr. Pramod Kumar Naik
Gaurav Kumar	Determinants of Crude Oil Price in India	Dr. Pramod Kumar Naik
Kajal Maan	Impact of covid 19 on indian economy	Dr. Hemlata Manglani
Kajal Sharda	An econometric analysis of India's bilateral trade with ASEAN countries: A gravity model approach	Dr. Hemlata Manglani
Shankha Shuvra Das	An Empirical Analysis of the bilateral trade between India and China	Dr. Hemlata Manglani
Pooja S Kumar	An Empirical Analysis of the determinants of Poverty: A study of selected States in India	Dr. Pragati Jain
Princy Tak	Fiscal Performance Index of India and Its Relationship with Economic Growth	Dr. Satyanarayana Murthy Dogga
Utkarsh Berwal	An Empirical Analysis of Energy Efficiency Development in India	Dr. Pragati Jain
Vasundhara Sharma	Rural Financial Inclusion Through Digital India	Dr. Hemlata Manglani



DEPARTMENT OF EDUCATION

Candidate Name	Title of the Dissertation	Supervisor Name
Abhishek Lavaniya	A Review Study on the Effectiveness and Implementation of Critical Pedagogy in Mathematics	Dr Gobind Singh
Anand Mohan Bhargav	Concept Mapping in Chemistry Pedagogy	Dr Sangeeta Yaduvanshi
Anshika Yadav	Review Study of the Researches on the Effectiveness of Multiple Intelligence in Mathematics	Dr Narendra Kumar
Chayanika Sharma	Teaching Principle of Total Internal Reflection to High School Students	Dr Anjali Sharma
Devkaran Dhanawat	Effect of the Five-Step Learning Cycle Model on Student's Understanding Related to Simple Harmonic Motion's Concept	Dr Anjali Sharma
Deepak Binyala	A Review Study on Effectiveness and Implementation of Student Centric Approach in Mathematics	Dr Gobind Singh
Deepak Kumar	e-learning in Chemistry	Dr Sangeeta Yaduvanshi
Deepak Kumar Sah	A review of Researches on Co-operative learning in Mathematics classroom	Dr Narendra Kumar
Gajanand Choudhary	A Review Study on Teaching Mathematics through Concept Motivation and Action Learning	Dr Narendra Kumar
Jitendra Gadwal	A Beginner Laboratory Manual for Chalchogen testing	Dr Sangeeta Yaduvanshi
Kalluri Ram Babu	Cooperative learning in Chemistry	Dr Sangeeta Yaduvanshi
Karan Singh Yadav	Blended Learning in Chemistry Classroom	Dr Sangeeta Yaduvanshi
Madhu	A Review Study on Effectiveness and Implementation of Challenge Based Learning in Mathematics	Dr Gobind Singh
Mahendra Kumar Hinonia	A Review Study of the Researches on Mathematical Aptitude and its Relation to Achievement	Dr Narendra Kumar
Manish Meel	Awareness of undergraduate students about liquid crystal and its property	Dr Anjali Sharma
Meena Pinky	Understanding Crystallography at School Level	Dr Anjali Sharma
Monika	A Review Study of the Researches on the Impact and Implementation of Mathematical Creativity	Dr Narendra Kumar
Nitin Chaudhary	Introduction of liquid crystal at Senior High School Level	Dr Anjali Sharma
Nitin Agrawal	A Review Study on the Implementation and Effectiveness of Context Based Pedagogy in Mathematics	Dr Gobind Singh
Priyanka	A Review Study on the Impact and Implementation of Artificial Intelligence in Mathematics	Dr Narendra Kumar
Rakesh Verma	To Find out Misconception among Students regarding Electromagnetic Induction	Dr Anjali Sharma
Rajat Shukla	Chaos at School: Chua's Circuit for Students in school	Dr Anjali Sharma