



Centurion
UNIVERSITY

*Shaping Lives...
Empowering Communities...*

SDG 8 | Research on Decent Work and Economic Growth

SDG 8

REPORT 2021



THE CONTEXT

Centurion University conducts research in the area of “Decent Work and Economic Growth” through its various schools and research centres. Faculty and students are engaged in and publish many research articles striving towards the standalone topic and others which are cross disciplinary. the University's production units, industry sponsored action learning laboratories and community engagement provide an excellent basis for research in this area.

In the year 2020, there were 27 research papers published in journals of national and international repute which increased to 38 in the year 2021. There were 13 published papers in the year 2022 excluding the papers under review and in-process. The following section serves as a link to last three-year research endeavour in SDG 8.

Jaggannath Padhi

Director,
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Research Articles

1. Novel method for chromatographic determination of Ulipristal Acetate in pure form and formulation by using RP-HPLC.
2. An unified control of grid interactive of board EV battery charger with improved Power Quality
3. Evaluation of nootropic activity of Bacopa monnieri and Convolvulus pluricaulis herbs extracts with Panchagavya ghrita
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5. An Optimized PI Controller-Based SEPIC Converter for Microgrid-Interactive Hybrid Renewable Power Sources
6. Biomass carbon and soil nutrient status in urban green sites at foothills of eastern Himalayas: Implication for carbon management
7. Implication of A4 modular symmetry on neutrino mass and mixing and leptogenesis with linear seesaw
8. Scalar dark matter and radiative neutrino mass in a U(1)B-L model
9. New Movement Strategy of Cuckoo Search for achieving higher profit rate in milling operation
10. Lung Cancer Detection using an Integration of Fuzzy K-Means Clustering and Deep Learning Techniques for CT Lung Images
11. Breeding for pest resistance in vegetable crops: A Review
12. Friction Stir Lap Welded Joints for Aluminum Alloys: An Evaluation
13. Spectral Characterization and Biological Studies of Some Ternary Complexes with Molecular Docking Investigations against MERS and SARS Type Corona viruses
14. Omicron (B.1.1.529 variant of SARS-CoV-2); an emerging threat: current global scenario
15. Design of Lagrangian based FOPID controller for desired closed loop system
16. Cluster Node Migration Oriented Holistic Trust Management Protocol for Ubiquitous and Pervasive IoT Network
17. Effect of Organic Manure on Growth and Development of Amur Carp
18. Seroprevalence and associated Risk Factors of Bovine Brucellosis in Chhattisgarh Plains, India
19. Frequency control in hybrid distributed power systems via type-2 fuzzy PID controller
20. Alleviating Cr (VI) stress in horse gram (*Macrotyloma uniflorum* Var. Madhu) by native Cr-tolerant nodule endophytes isolated from contaminated site of Sukinda
21. An optimized KELM approach for the diagnosis of COVID-19 from 2D-SSA reconstructed CXR Images
22. Effect of Nanoparticle Electrification on the Heat and Mass Transfer of Nanofluid Flow over an Inclined Flat Plate with Active Boundary Conditions
23. Turbulent Flow Simulation over Two- Dimensional Simplified Car in Dusty Fluid Medium
24. Measurement of Effect of Volatility in Crude Oil Prices on Share Prices of Major Petroleum Companies in the Indian Stock Market
25. Prioritized Energy Efficient Task Scheduling Algorithm in Cloud Computing Using Whale Optimization Algorithm
26. Adapted Facial Recognition And Spoofing Detection For Management Decision Making System: A Visually Impaired People Perspective

27. Influence of Demographic Factors on the Mobile Banking Technology Adoption by Customers: A Case of Few Nationalized Banks of Odisha
28. Modelling and forecasting of rice production in south Asian countries
29. Evolutionary Computing Tools based Design of Elliptical Antenna Array for Amplitude-Position Technique
30. Characterization of Pure Rutile Titania Nanoparticle Prepared by Feasible Method for Coatings and Visible Light-Driven Dye Removal Application
31. Magnetic property applications of microwave method prepared zinc ion modified CoAl₂O₄ nanoparticles
32. Study of physical and magnetic properties of Mg: Co₃O₄ spinels using L-Arginine as fuel
33. Harmonic Profile Enhancement of Grid Connected Fuel Cell through Cascaded H-Bridge Multi-Level Inverter and Improved Squirrel Search Optimization Technique. Energies
34. WRAPPER-Based Metaheuristic Optimization Algorithms for Android Malware Detection: A Correlative Analysis of Firefly, BAT & WHALE Optimization
35. In silico studies on phytochemicals to combat the emerging COVID-19 infection
36. Repurposing benzimidazole and benzothiazole derivatives as potential inhibitors of SARS-CoV-2: DFT, QSAR, molecular docking, molecular dynamics simulation, and in-silico pharmacokinetic and toxicity studies
37. The Consecutive Hits of COVID-19 in India - The Mystery of Plummeting Cases and Current Scenario
38. Transition Metal-Catalyzed Carboamination of Alkenes and Allenes: Recent Progress
39. Metal-Free Intramolecular Hydroalkoxylation of Alkyne: Recent Advances
40. Rice husk and Rice straw based materials for toxic metals and dyes removal: a comprehensive and critical review
41. Performance analysis of Variable Compression Ratio Engine using Argemone Mexicana Biodiesel
42. Teacher Competence and 21st Century Challenges: A Critical Analysis of Existing Teacher Competency Frameworks
43. AHP (Analytical Hierarchical Process): A Novel Approach of Decision Making in Aerospace Industry Supply Chain Optimization
44. Prioritising the factors influencing Productivity in an Aerospace Manufacturing Sector: An Application of Analytical Hierarchical Process
45. Assessment and Prioritization of Supply Chain Risk: Development of AHP Model in Aerospace Industry
46. Prediction by SoFt Computing, Planning, and Strategy Building of Aquatic Catch: Chilika Lagoon, Odisha, India,
47. Crucial cell signaling compounds cross-talk and integrative multi-omics techniques for salinity stress tolerance in plants
48. Dynamic task scheduling using nature inspired algorithm
49. Enhancement investigations on Dielectric and Electrical properties of Niobium pentoxide (Nb₂O₅) reinforced Poly (vinylidene fluoride) (PVDF)- Graphene Oxide (GO) Nanocomposite Films
50. Productivity and Profitability of Kharif Rice are Influenced by Crop Establishment Methods and Nitrogen Management in the Lateritic Belt of the Subtropical Region



51. Vermi-biofiltration for removal of chemical and biological pollutants from municipal wastewater for agriculture - a review
52. Evaluation of Quality Parameters of Seven Processing Type Potato (*Solanum tuberosum* L.) Cultivars in the Eastern Sub-Himalayan Plains.
53. Women's Participation in Local Government: Insights from Victoria (Australia)
54. Women Farmers in South Odisha: Empowerment through Agricultural Interventions
55. Stock Market Anomaly: Day of the Week Effect in Bombay Stock Exchange with the Application of GARCH Model
56. Measurement of Risk and Return Spillovers Effects among Sensex and Equity Based Mutual Funds in India
57. Exploring Peoples' Perception towards Government Policy on banning Poly Bags – a Case Study of Bhubaneswar Smart City
58. Global, Regional, National Vs. State Level Progress in Financial Inclusion of Odisha: A Contemplation
59. Impact of Growth of Automobile Production on Performance of Automobile Sector in India
60. Valuation of Start Up Companies: A Case Study of Start-ups in Odisha
61. Investment Awareness and Preference of the Individual Investors towards Gold ETFs in the Twin City of Bhubaneswar and Cuttack
62. Financial Inclusion vis-à-vis growth and poverty alleviation: An empirical approach
63. Future of Farming – Why Achieving Sustainability Remains Elusive?
64. Education in Schools Managed by Urban Local Bodies
65. Urban Health Service Delivered by Local Bodies in India
66. Road Infrastructure Provided by Urban Local Bodies in India
67. Challenges of Common Service Centers of Rayagada District – Findings from a VLE centered analysis
68. The Prevalence and Severity of Stress Related Symptoms within a District Police Force, Odisha
69. Street lighting amenity provided by Municipal Corporations in India
70. Management of Urban Parks and Playgrounds in Developing Countries: A Case Study
71. Citizen centric e-Governance - challenges and issues: A study in Rayagada district
72. A Study on Factors Influencing Investor's Investment Decision
73. Effect of corporate governance on acquiring firm performance: Evidence from construction industry
74. Minimization of Inventory Cost for Items having Fuzzy Demand with Backlogged Shortages in Positive Lead time.
75. Exploring the Integration of IoT in Effective Personalized Learning and Addressing Learning Challenges for Disabilities
76. Current Transformer Saturation & Impact analysis of CT saturation on healthy system & Distance Protection in power network
77. Cluster Priority based Holistic Trust Management Protocol for Ubiquitous and Pervasive IoT Network
78. A Simulation Study for Graphite-Based Vacuum Coupler for the Ion Beam Irradiation

