



Centurion
UNIVERSITY
*Shaping Lives...
Empowering Communities...*

SDG 13 | Research on Climate Action

SDG 13 REPORT 2021



THE CONTEXT

Centurion University conducts research in the area of “Climate Action” 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 15 research papers published in journals of national and international repute which increased by 7 and 8 in the year 2021 and 2022. The following section serves as a link to last three-year research endeavour in SDG 13.

Jaggannath Padhi

Director,
Centurion University



Research Articles

1. The Drowning City and Climbing Vulnerability of Capital City, Odisha, India
2. Riverbank Old Cities Housing-crisis Solution by Removal of Shoals: the Mahanadi near Cuttack: India
3. Rainfall variability under climatic anomalies using SVM, PSO hybrid model of Bhubaneswar Smart City; India
4. Change Detection in Coastal Zone of Odisha Using Geospatial Technology: A Case Study from Puri District
5. Fani, an Outlier among Pre-monsoon Intra-Seasonal Cyclones over Bay of Bengal
6. Paradigm Shift on Environmental Sustainability by Replacing GGBS in RMC: Industrial Waste Utilization
7. Thermally Compatible Cinder Blended LWC; Shuffle to Environmental Sustainability of Steel Plant Areas: India
8. Weather Forecasts Based on Rainfall Prediction Using Machine Learning Methodologies
9. A review on cyclone resistant plants found in cyclone prone Odisha, India
10. Static and dynamic environmental-economic dispatch using tournament selection-based ant lion optimisation algorithm
11. Satellite-Based Characterization of Phytoplankton Blooms in Coastal Waters of the Northwestern Bay of Bengal.
12. CSR Expenditures by Top Private Sector Companies and PSUs in India: A Comparative Analysis
13. Yield stability under different agronomic situations in linseed (*Linum usitatissimum* L.)
14. Genome-Wide Analysis and Characterization of the Proline-Rich Extensin-like Receptor Kinases (PERKs) Gene Family Reveals Their Role in Different Developmental Stages and Stress Conditions in Wheat (*Triticum aestivum* L.)
15. Bioinoculants—Natural Biological Resources for Sustainable Plant Production
16. Transungual Drug Delivery System for the Topical Treatment of Onychomycosis: A Review
17. Effect of annealing time on the applicability of potato starch as an excipient for the fast disintegrating propranolol hydrochloride tablet
18. A Survey on the Ethnomedicinal plants and Antimicrobial activity of *Tridax procumbens* L.
19. Traditional plants utilized for the viral disease treatment
20. Growth and yield of basmati rice under different crop establishment methods and sowing environment
21. Selection of Low Temperature Thermal Power Cycles
22. Performance analysis of a waste heat recovery solar chimney for nocturnal use
23. Carbon Storage of Single Tree and Mixed Tree Dominant Species Stands in a Reserve Forest—Case Study of the Eastern Sub-Himalayan Region of India
24. Fabrication and Characterization of Physical and Mechanical Properties of Carbon Nanotubes Graphene-Based Sandwich Composite Pressure Sensor
25. Torpor in insects
26. Plastic waste as threat to environmental sustainability in smart cities: A systematic review of extant literature

27. Does Bonus Announcement Effect on Stock Prices: Evidence from Listed Companies in India
28. Unravelling tidal effect on zooplankton community structure in a tropical estuary
29. Evaluation of hydro-biological parameters in response to semi-diurnal tides in a tropical estuary
30. Zinc Biofortification in Food Crops Could Alleviate the Zinc Malnutrition in Human Health

