

Evaluating the Research Performance and Impacts of the National Institute of Oceanography India: a Scientometric Dimension

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This study aimed at analyzing the research productivity and citation impacts on National Institute of Oceanography (NIO), India. A web-based literature survey using the Web of Science (WoS), database identified 4,204 publications affiliated with CSIR –NIO, India from 2000 to 2024. The Research output of the NIO had experienced substantial growth over the past two decades. The number of publications increased from 78 in the year 2000 to a peak of 260 in 2021. Over the period from 2000 to 2024, NIO had contributed a total 4206 publications which collectively received 88,437 citations. The total citation impact over the study period was recorded at 2391.04%, underscoring the substantial global relevance and rising influence of NIO's scientific contributions. The research highlighted a shift toward collaborative work with many authors contributing to most publications. International collaborations were prominent, especially with scientists in the 'United States', 'France', and 'Germany'. Seventy-three fields were explored at NIO, most notably environmental science, oceanography and marine biology. The institutional research was frequently published in prominent journals such as Current Science (297 publications), the Indian Journal of Geo Marine Sciences (124 Publications) and Marine Pollution Bulletin (118 Publications), representing the breadth and depth of its scientific contributions. Prominent authors including Sarma, V.V.S.S. (162 papers), Anil, A.C. (149 papers), and Naqvi, S.W.A. (9133 papers) had made substantial contributions to the field, with many of their most cited works focusing on Indian Ocean monsoon dynamic and marine ecosystem studies. According to the 2024 Scimago institutional performance rankings, NIO ranked within the top two percent of institutions, globally for research output and social impact. The analysis noted that relying solely on WoS leaves out publications indexed elsewhere, such as Scopus. Future studies could incorporate additional databases, metrics of achievement and a broader examination to develop a more thorough understanding of the long-term research effects of the NIO.

Keywords: *CSIR Institute; National Institute of Oceanography (NIO); Research performance; Scientometrics*