

BIBLIOMETRIC ANALYSIS OF PUBLICATIONS ON ECOLOGICAL CONCRETE

Author **Elena MARICA**

Lucian Blaga University of Sibiu , elenamarica93@yahoo.com [ORCID: 0000-0003-0673-8498](https://orcid.org/0000-0003-0673-8498)

Author **Maria POPA**

Decembrie 1918 University of Alba Iulia , mariapopa2010@yahoo.com [ORCID: 0000-0002-9899-4423](https://orcid.org/0000-0002-9899-4423)

Abstract:

Waste management is a major problem, so solutions to prevent and reduce waste are constantly being sought. One of the methods of recovering construction waste is the manufacture of environmentally friendly concrete by incorporating waste into technological processes. Legislation sets targets for recycling and reducing the quantities of waste generated, failure to meet these targets entails significant financial penalties, which is why the emphasis is on the circular economy, which aims to manage the resources used efficiently by reducing the quantities of waste and by recovering them efficiently, in particular through reuse. Construction waste management is a significant problem considering the intensity of construction, the high volume of waste generated and the insufficiency of waste recovery methods, therefore we intend to show through this study the progressive increase of interest in the use of ecological concrete resulting from waste recovery. The aim of the research is the bibliometric analysis of publications on ecological concrete using the Scopus database and the VOSviewer software. The study analysed 590 publications from more than 76 countries, published between 1986 and 2022, which had the keywords: concrete and ecological as a common topic. The research results highlight the countries most concerned with ecological concrete, the period in which the subject was of major interest, and the field from which most researchers interested in ecological building materials come.

Keywords: concrete, ecological, VOSviewer, bibliometric analysis

JEL codes:: L61, L74