1. Record Nr. UNINA9910409688703321 Microbial Biotechnology Approaches to Monuments of Cultural Heritage Titolo // edited by Ajar Nath Yadav, Ali Asghar Rastegari, Vijai Kumar Gupta, Neelam Yadav Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa **ISBN** 981-15-3401-2 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (208 pages) Disciplina 660.62 Soggetti Microbiology Urban ecology (Biology) **Biochemistry Urban Ecology** Biochemistry, general Microbiologia Protecció del patrimoni cultural Biotecnologia microbiana Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Chapter 1. Microbial Community Present on the Reverse Side of a Nota di contenuto Deteriorated Canvas -- Chapter 2. Microbial Biocleaning Technologies for Cultural Heritage: Current Status and Future Challenges -- Chapter 3. Role of Bacterial Communities to Prevent the Microbial Growth on Cultural Heritage -- Chapter 4. Entomogenous Fungi and the Conservation of the Cultural Heritage -- Chapter 5. Microorganisms and their Enzymes as Biorestoration Agents -- Chapter 6. Bioremediation of Cultural Heritage: Removal of Organic Substances --Chapter 7. The Role Microorganisms for the Removal of Sulphates on Artistic Stoneworks -- Chapter 8. Microbiological Tools for Cultural Heritage Conservation -- Chapter 9. Biotechnology to Restoration and Conservation -- Chapter 10. Biocement: A novel approach in the restoration of construction materials.

Sommario/riassunto

Our country's cultural legacy is one of the world's most diverse, drawing millions of visitors every year to our convents and monuments. and to our museums, libraries, concert halls and festivals. In addition, it is a dynamic trigger of economic activity and jobs. Among the various scientific branches, microbial biotechnology offers an innovative and precise approach to the complexity of problems that restorers face in their daily work. This book discusses a range of topics, including the biodiversity of microbial communities from various cultural heritage monuments, microbial biotechnological cleaning techniques, the role of bacterial fungal communities for the conservation of cultural heritage, and microbial enzymes and their potential applications as biorestoration agents. Written by internationally recognized experts, and providing up-to-date and detailed insights into microbial biotechnology approaches to cultural heritage monuments, the book is a valuable resource for biological scientists, especially microbiologists, microbial biotechnologists, biochemists and microbial biotechnologists.