

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)
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Author: Mr. Sukhjit Singh
Space Generation Advisory Council (SGAC), India

Ms. Agnieszka Pukacz
Lodz University of Technology, Poland

Ms. Agata Stefańczyk
Poland

Ms. Agnieszka Elwertowska
Space Generation Advisory Council (SGAC), Poland

Mr. JASJIT SINGH
Space Generation Advisory Council (SGAC), India

DESIGNING OF A MULTIFUNCTIONAL ASTRONAUT GAUNTLET FOR HEALTH AND
COMMUNICATION

Abstract

Embarking on a mission to advance astronaut health monitoring, this project focuses on developing two multifunctional devices, with a key emphasis on a space-oriented watch. This wearable analyzes stress patterns and crucial health metrics, including bone density and sugar levels, providing a comprehensive solution for space exploration. Leading the project involves strategic planning to optimize mission effectiveness. The central component is a cutting-edge space watch, seamlessly integrating advanced sensors and AI, utilizing Natural Language Processing (NLP) for effective data interpretation. The proposed space watch offers a holistic approach to astronaut health through stress pattern analysis, bone density readings, and real-time sugar level monitoring. Beyond early issue detection, it contributes to the development of customized space suits and spacecraft, ensuring astronaut well-being during extended space missions. In summary, this project pioneers wearable technology, creating a sophisticated, AI-driven space watch as a transformative tool for outer space exploration's health challenges.