To: Professor Francesco Lamonaca

Editor in chief,

Acta Imeko The Imeko online Journal

October 09th, 2021

**Original paper submission**

**Title**: An IoT solution for continuous Indoor Environmental Quality monitoring during renovation in buildings

**Authors**: Serena Serroni, Marco Arnesano, Luca Violini, Gian Marco Revel

Dear Editor,

We are pleased to submit an original paper about the development and application of an IoT measurement system for indoor environmental quality monitoring. This paper is part of the Horizon 2020 project called P2ENDURE, which aims to provide tools and methodologies for buildings’ renovation.

We developed an advanced version of the Comfort Eye sensor to provide an IoT solution to measure environmental data for continuous IEQ monitoring. The device was installed in a real demo case located in Gdynia (Poland) to measure and compare the IEQ before and after renovation works.

The manuscript presents an introduction about the importance of IEQ measurements and challenges to provide continuous monitoring to improve comfort and well-being. Then, the new Comfort Eye sensor and IoT architecture are presented together with the IEQ monitoring protocol. Finally, results from the experimental application in a real case study are presented to provide evidence of the applicability and advantages of the proposed measurement system.

Given the importance of the topic and the challenging problem of correctly measuring the IEQ for continuous monitoring, we believe that the proposed manuscript would be of interest for the Acta IMEKO online Journal.

We communicate that this submission is to be intended specific for the Special Section on the "**Measurement Day 2021**" and represents an original work that has not been published previously and is not currently being considered by another journal. Also, we confirm that each author has seen and approved the contents of the submitted manuscript.

We are pleased to suggest the following reviewers:

* Bruno Bueno (bruno.bueno.unzeta@ise.fraunhofer.de)
* Cristina Piselli (cristina.piselli@unipg.it)
* Federico Seri (federico.seri@nuigalway.ie)

Thank you for your consideration of our work. Please address all correspondence concerning this manuscript to s.serroni@pm.univpm.it

Kind regards,

Immagine che contiene testo

Descrizione generata automaticamente

Corresponding author, on behalf of the authors.