In recent years, the term ‘sustainability’ has gained importance in urban context. Several programs have been organized to create sustainable cities in terms of ecological, social, cultural, and economic aspects. Today one of the most problematic issues is sustainable quality of existing housing stock in urban areas. The problems of existing housing stock can be listed as physical, structural and infrastructural deteriorations etc. Most of them are related with aging of building elements, limited material life and improper use. Especially, modern residential buildings
built between early 1930’s and 1970’s need to be renovated for sustaining quality of space. Countries in Europe have a huge building stock from this period. Renovations and refurbishments of these apartment blocks/buildings are generally based on renewing infrastructural elements and energy saving implementations that are determined by energy efficiency laws. This study focuses on the relationship with spatial quality and infrastructural problems aiming to understand how it affects the users' experiences/behaviours on their apartments in regard to installations and infrastructural problems and maintenance. The study also focuses on users to examine their tendency to protect and maintain their dwellings to sustain the spatial and physical quality, depending on their characteristics.

The research was conducted in a modern period housing estate in Istanbul (4. Levent Neighbourhood) to answer the questions: How do the installation and infrastructural problems effect on the housing quality? And ‘How do the users’ behaviours affect to provide sustainable spatial quality in modern housing estates? The methodology of this study includes research techniques as site observations, surveys and in-depth interviews. With the results of the research a critical approach will be discussed to show the actual needs of basic refurbishment/maintenance.

6. Author(s) Biography (200 words each):

A: Hatice Sadikoğlu took her bachelor degree from Yıldız Technical University, Faculty of Architecture, and Department of Architecture in 2007. In 2010, she took M. Sc. degree from Istanbul Technical University with the thesis about high income residential users and their experiences. In 2016 she completed doctoral thesis on sustainability of the space quality and modern movement. Between 2013 and 2014 she was working as a visiting researcher in Rome La Sapienza University. Since 2015, she has been working as an instructor in Bahçeşehir University

B. Ahsen Özsoy studied architecture at Istanbul Technical University (ITU). She completed her PhD (1983) at ITU Faculty of Architecture, received full professorship in 1995 and is still teaching in the same institution. She has taught architectural design, housing research methodologies, psychology and architecture, housing phenomenon. She has research studies and publications on topics of housing quality; urban transformation and housing design; earthquake, housing and woman’s role; man-environment studies and architectural education. She has been responsible for the design and interior design of educational and residential projects and has received national architectural awards. Administratively, she has served as Director of Institute of Social Sciences and Vice Rector of ITU.