Symposium

Title: Human Centred Design for passenger’s enhanced comfort and wellbeing in Aircraft cabin

ABSTRACT:

Human Centered Design processes are gaining the growing attention of researchers in industry and academia in order to increase the competitiveness and the social and environmental impact of products.

In the aviation domain a special focus is on the passengers with the aim of improving their comfort and well being and to predict the quality of their experience while flying in new conceived aircraft cabin interiors.

The topics will cover the following domain:

Noise and Vibration for cabin interiors

Innovative non structural materials for cabin items

Human Centered Design Approach for interior design

Virtual Reality for human in the loop simulation of next generaion interiors

Ergonomic studies for cabin interiors

SYMPOSIUM N.3

HUMAN CENTRED DESIGN FOR PASSENGER'S ENHANCED COMFORT AND WELLBEING IN AIRCRAFT CABIN

Chaired by Prof.ssa Francesca De Crescenzio
Department of Industrial Engineering
University of Bologna – Italy

Paper N. 1 F. De Crescenzio, S. Piastra, S. Bagassi - **EXPERIMENTAL PROCEDURES FOR PRELIMINARY USER CENTERED EVALUATION OF REGIONAL AICRAFT CABIN INTERIORS IN VIRTUAL REALITY**

Paper N. 2 Mahnaz Sharafkhani, Sue Cobb, Elizabeth Argyle, Paul Tennent - **IMPROVING AIRCRAFT PASSENGERS' HEALTH AND COMFORT THROUGH VIRTUAL REALITY APPLICATIONS**

Paper N. 3 S. Valvano, A. Alaimo, C. Orlando - **SOUND TRANSMISSION ANALYTICAL SOLUTION OF PASSIVE DAMPED MULTILAYERED PLATE STRUCTURES**

Paper N. 4 M.C. Moruzzi, M. Cinefra, E. Carrera, M. Barbarino, P. Vitiello, S. Bagassi - **VIBROACOUSTIC ANALYSIS IN THE CABIN OF A REGIONAL TURBOPROP WITH INNOVATIVE MATERIALS BY ACTRAN**

Paper N. 5 M. Guida, P. Leoncini - **COMFORT ASSESSMENT OF AIRCRAFT INTERIORS IN A VIRTUAL IMMERSIVE ENVIRONMENT**

Paper N. 6 R. Lombardi, P. Vitiello, M. Barbarino, G. Petrone, M. Cinefra, C. Colangeli - **SOUND QUALITY OPTIMIZATION OF A TURBO-PROP AIRCRAFT CABIN THROUGH PASSIVE TECHNOLOGIES**

Paper N.7 P. Russo, F. Branda, T. Polito, F. Marulo, M. Guida, J. Passaro, B. Vitolo D. Di Maio - **DESIGN AND DEVELOPMENT OF A NEW CONCEPT FOR TERMOACOUSTIC INSULATION BLANKETS, IN CIVIL AIRCRAFT APPLICATIONS**

Paper N. 8 C. Casale, T. Polito, V. Trifari, M. Di Stasio, P. Della Vecchia, F. Nicolosi, F. Marulo - **IMPLEMENTATION OF A NOISE PREDICTION SOFTWARE FOR CIVIL AIRCRAFT APPLICATIONS**

Paper N. 9 A. Alaimo, A. Esposito, F. Lo Iacono, G. Navarra, C. Orlando - **AIRCRAFT PASSENGER WHOLE BODY VIBRATION ANALYSIS**

Paper N. 10 D. Bianco, V. Giannella, C. Colangeli, G. Petrone, R. Citarella, F. Branda, M. Barbarino - **EXPERIMENTAL INVESTIGATION ON OPTIMISED AIRCRAFT SEAT HEADRESTS**

Paper N. 11 A. Di Salvo, C. Germak - **THE EXTENDED COMFORT. ANALYSING THE FLIGHT JOURNEY THROUGH A DESIGN-ORIENTED APPROACH.**

Paper N. 12 C. Germak, A. Di Salvo - **COLOURS AND AIRCRAFT INTERIORS. DESIGN SCENARIOS FOR A REGIONAL AIRCRAFT CABIN.**