

## Friday Afternoon

### LUNCHEON SEMINAR; CHAIR: TO BE DESIGNATED

*Research and business related to an aging society at Matsushita Electric Works  
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This paper discusses Matsushita Electric Works' strategy for designing equipment from the viewpoint of Ergonomics and Kansei Engineering to assist the elderly.

We refer to Universal Design philosophy related to the development of equipment to assist elderly people.

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### PAPER SESSION 'PHYSICAL CHARACTERISTICS'; CHAIR: KAZUO TANI (JAPAN)

*Design of sliding door based on effects of applied force, shape and dimension  
of operating part*

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The applied force of sliding door and the shape and dimension of its operating part were examined in terms of friendliness for users including elder people in order to learn the basic design requirements of sliding door. The maximum force was measured with subjects using the operating parts installed on a wall. The maximum force of elder male observed was 42N on average, elder female 44N. The sensory evaluation test was held to

check the influence of applied force and form and dimension of operating part on opening and closing with a full-size mock sliding door. While the applied force of 10N was highly evaluated, 30N was poorly valued regardless of the shape and dimension of operating part. The most remarkable effect was observed in case of 20N: the shallower handgrip was strictly assessed and the bar handle was highly appreciated.