

ISRP 1999 abstract

Presenter/author	Title	Abstract
Masayoshi, Takahashi <i>National Institute for Resources and Environment 16-3 Onogawa, Tukuba Ibaraki 305-8569 Japan</i>	Ventilatory Responses to Carbon Dioxide during Moderate Exercise	<p>Elevated carbon dioxide concentration is one of the most serious physiological stressors while using closed-circuit-breathing-apparatuses. For considering the appropriateness of the criteria for permissible level of inhaled CO₂, we need more accurate information about the ventilatory responses to CO₂ during working condition.</p> <p>The responses were measured by 13 subjects with the steady-state method; breathing air and 3 % CO₂ while rest and moderate exercise conditions. It has been demonstrated that there was very wide range of the respiratory response among the subjects, and the responses during exercise were approximately 70 % higher than the values during rest. As the physiological stress on human body will be more serious with increasing ventilation, so the criteria must be decided on the basis of the effect of CO₂ during exercise.</p>