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## Efforts to Reduce Muscle Fatigue Through Gymnastics Relaxation and Ergonomic Approach on Computer Users in Central Building State University of Medan

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**Abstract** - Computer exhaustion due to long and monotonous computer use can lead to problems of dominant fatigue associated with decreased performance and work motivation. Specific targets in the first phase have been achieved: (1) Identified complaints on workers using computers, using the Bourdon Wiersma test kit. (2) Finding the right relaxation & work posture draft for a solution to reduce muscle fatigue in computer-based workers. The type of research used in this study is research development with the method of "Research and Development" which aims to produce products or refine existing products that can be justified. The resulting product is a backstop design, monitor filters and relaxation gym design and the provision of a pocket book design how to do relaxation exercises while in front of the computer to lower the fatigue level for computer users at the Unimed Administration Center. In the first phase, observations and interviews have been conducted and identified the level of fatigue on the employees of computer users at the Center of Administration Unimed using bourdon wiersma test and has obtained the following results: (1) The average time velocity of respondents in BAUK, BAAK and BAPSI after work with the value of interpretation of the speed obtained Value 8.4, WS 13 including the Fair Enough, (2) The average accuracy of respondents in BAUK, in BAAK and in BAPSI after working with interpretation value accuracy obtained Value 5.5, WS 8 including class Ragu-Ragu, This shows that computer users are very fatigued at the Unimed Administration Center, (3) Consistency of average measurement of fatigue level on computer users in Unimed Administration Center after working with values for consistency interpretation obtained Value 5.5 with WS 8 including the Doubt group which means computer user in The Unimed Administration Center suffered a tired fatigue high coup. In phase II, based on the results of the first phase of research the researcher offers solutions to the problems of back buffer design, monitor filters and designing proper relaxation exercises to reduce fatigue levels, as well as providing a pocketbook design for how to do relaxation exercises while in front of a computer for workers using computer at Unimed Administration Center.

**Keywords:** Ergonomic Approach, Level of Work Fatigue, Bourdon Wiersma, Gymnastics, Relaxation

**Topic:** Physics Education

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## Magnetic Properties and Thermal Conductivity of MWCNTs/Fe<sub>3</sub>O<sub>4</sub> Nanocomposit as adsorben of Waste Water

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Abstract-