

# Monthly Meeting for OptiColor Project

**Month:** July

**Date:** 30-July-2019

**Type:** Skype Meeting

**Atten.:** AM (S-Innovations Ltd) and AL (RISE), HP (RISE)

## Topics Discussed

### 1 Project Website

- Few uploads - Nothing to discuss

### 2 WP1 - Project Planning

#### Tasks behind Schedule:

- Task 3.2 Develop background-foreground color combination matrix
- Task 6.6 Scientific Paper 1 (Topic: Color combination Matrix)

### 3 WP2: Dissemination Activities

- Task 6.6 Scientific Paper, must be complete within August. Presenting just the Color Matrix may not be sufficient. A more complete topic was presented by AM. Selected Scientific Journal

**Journal:** Safety Science

**Title:** A method for selecting the optimal color for High-Visibility Safety Apparel (HVSA)

**or** A color combination matrix for selecting an optimal color for high-visibility safety apparel ...**or similar**

**Abstract:** The use of high-visibility safety apparel (HVSA) is a typical safety requirement at many worksites. HVSA make personnel more conspicuous and reduce the number of occasions where people are not seen and accidents happen. The colour contrast between HVSA and the predominant colours at the worksite is the main factor affecting conspicuity during daytime. The standard colours for high-visibility clothing specified in the relevant ISO and ANSI standards are red, orange and yellow. These colours offer high colour contrast in many situations; however, they are not suitable for worksites where the predominant colours are similar (i.e. yellow at offshore structures, red at tanker decks etc.). In this study, we start by adding three more colours (green, blue and magenta) to the standard high-visibility colours. Then, we present a methodology for assessing the predominant worksite colours and determining the most suitable colour for HVSA. The methodology use worksite photographs and rudimentary image analysis techniques to determine the predominant colours and to evaluate the contrast of those colours to the colour of standard HVSA. Finally, we apply the same methodology to develop a colour combination matrix that can be used in selecting the optimal high-visibility colour without using image processing. The purpose of the matrix is to serve as reference for safety practitioners when selecting colours for HVSA.

### 4 WP4: Software development

- Sensitivity Analysis Failed.
- Issues arised when analysing an image set a total. (See separate attachment)
- Root cause is the issue with photographs where light conditions are not good. Dark images, light areas (shiny areas), shadowing areas. A color fixing filter will be added

### 5 WP5: Validation

- Validation software completed (Harris + Ηρακλής)
- Vailidation tests and report scheduled for August.

### 6 Next Meeting

- Next meeting on Tuesday, 27-Aug-2019 at 15:00 hours