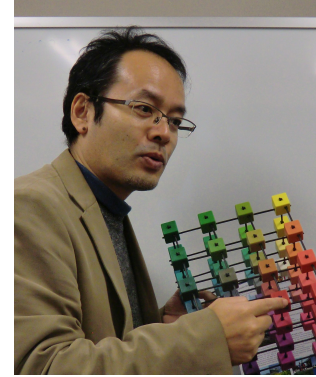


Title: Physical and perceptual worlds of material appearance

Speaker: Takahiko Horiuchi

Abstract:

When we observe objects in our surroundings, various perceptions and emotions are evoked within us. For example, the sight of a beautiful glittering jewel leads to the perception of luster, which evokes feelings of admiration and luxury. The feelings may further influence our behaviour by motivating us to purchase the jewel. Although the relationship between colour and emotion has been the subject of many studies over the years, research on visual appearance cues other than colour is still in its early stage. For example, our experiments have shown that physical gloss measured by a gloss meter does not necessarily correlate with the glossiness perceived by the human eye. However, the relationship between them has not been elucidated. In this talk, I will introduce our efforts to elucidate the relationship between physical properties (physical gloss, surface roughness, etc.) and perceptual attributes (perceptual gloss, perceptual roughness, etc.) of material objects. In addition, applications based on those analyses will be presented.



Biography:

Prof. Takahiko Horiuchi is a professor at the Graduate School of Engineering, Chiba University, Japan. He is a chair of Department of Imaging Sciences. He has made several important contributions to colour image science and technology. His contributions, spanning over the past quarter century, range from the fundamentals of colour imaging to its computer image applications. He has contributed in particular, to advancements in colour image processing, spectral imaging, and colour perception. From 2018 to 2021, he served as the Executive Committee of the International Colour Association (AIC). He has published more than 320 scientific papers on international journals or conferences in the field of colour sciences and engineering.