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Imperial
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Organics
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makers of dyestuffs,
pigments, industrial
and polyurethane
chemicals

Mr.R.G.Kuehni,
Mobay Chemical Corporation,
P.O.Box 385,
Union Metropolitan Park,
Union, N.J.07083,
USA.

Your ref

Our ref

Date

AR.TS/T/KMcL/BS

24 March, 1976.

Dear Mr.Kuehni,

Thank you for your letter dated 17 March.

It will be easiest for me to discuss the various points you raise in the order in which you raise them rather than in a logical sequence.

You should by now have received a copy of my Nottingham paper and in Tables 7 and 8 the value of average weighting factors is clearly indicated. In spite of this however, on page 27 I express the view that they should not be used for routine colour difference determination because I am in complete agreement with you that the calculation of these weighting factors individually for microspaces would reveal enormous differences.

If one takes pairs of samples of the same value of ΔE located at increasing distances from the achromatic axis their perceptibility decreases and I find it impossible to regard this as a form of crispening as defined by Takasaki.

If we were beginning the search for an internationally accepted equation now we would not look for the equation with highest reliability because we have learnt a lot since we started in 1968. We would aim for an equation which permitted ready splitting as I described at Williamsburg. It is extremely fortunate that the most reliable equation is also the best for this purpose.

I object to the use of the x, y diagram in development work because lines of constant hue are not straight and hence detection of hue differences becomes very difficult. Why do you prefer the x, y diagram to the u, v diagram?

The 30:1 ratio is merely the ratio between the longest and shortest axes found in MacAdam's original study. Neither his nor Wyszecki's ellipses are suitable for re-plotting because they are not based on surface colours.

My "all or nothing approach" is essentially political because as you will see from my Nottingham paper I am not opposed to further research being carried out into the development of a better method of quantifying colour differences.



I was one of those who asked the CIE at the London meeting to include a clause to this effect. My Williamsburg abstract was written immediately after the CIE meeting in London when the USA voted against the development of CIELAB. I assumed that this was in part due to your activities as at that time I did not know that your report had only partially found acceptance within the ISCC; I did not know either that the influential Lou Graham was a strong supporter of StarLab. My objective at Williamsburg was therefore to persuade the Americans that CIELAB should be adopted and this influenced the wording used. I am enclosing a copy of the revised abstract which will be the permanent record of my contribution and I think you would regard this as more constructive.

With kindest regards,

Yours sincerely,



K. McLaren

Enc.