

# Hexagon Tower Colour Synthesis Solutions

**Kelly Schaefer**, Marketing Director at Colour Synthesis Solutions, talks about the world of custom colour and dye synthesis, and life at Hexagon Tower.

## Please tell us about Colour Synthesis Solutions (CSS).

Colour Synthesis Solutions was set up in 2006 by two professors from the University of Manchester looking for a new challenge. Using their industry contacts and word-of-mouth recommendations, they began CSS, a contract research organisation (CRO) that today helps to design, research and develop novel dyes and other highly specialised chemicals to meet customers' individual applications and specifications. We have a staff of 12 in the UK, including six PhD research chemists, and we work with customers worldwide, from university groups and technology start-ups through to large multinational chemical and technology companies; our client base is expanding all the time.

## What services do you offer your customers?

Our expertise is in chemical synthesis, but more specifically in colours and dyes. Historically, colours have been associated with the textile industry, but we also serve the plastics and electronics industries, for the production of liquid crystal displays and organo-photovoltaics. As a CRO, we work alongside our customers to help them design products and develop manufacturing processes, from pilot-scale studies performed in house to full scale manufacturing. We also offer analytical services, not only for initial identification and analysis, but also to ensure compliance with the regulations for FDA food contacts or REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals).

## What is it that makes CSS special?

One of the major advantages of working with a small company is that we can react quickly to meet changing customer needs. Customers enjoy a close working relationship with our project managers, lead chemists and colour technologists, and we customise our work to match our clients' exact requirements, adapting

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as the project grows and develops. Companies can also 'lease' one of our chemists for research at our Manchester lab. This offers them the benefits of a highly experienced chemist – allowing them to easily direct the focus of their work on a regular basis and share ongoing results – without the employment obligations or the requirement for their own lab space. We can even provide small-scale manufacturing services; there is often a demand for small volumes of dyes and colours for specific applications, but it is difficult for large manufacturers to accommodate these requirements. We're unique in that we can manufacture small volume, high-end products to tightly controlled, high specification standards.

### **What challenges do your customers face, and how do you help to overcome them?**

We help customers to overcome a wide variety of challenges, whether or not they are listed on our website – all people need to do is ask! Our customers have an in-depth knowledge of their products and applications, but are generally not experts in colour chemistry. Many of them turn to us for help in understanding how a colour is going to work in their product, as they realise that we have the dye chemistry know-how. We help them to find ways to modify their molecules, incorporating specific characteristics to make the dye behave the way it needs to in the end product, such as making it more or less soluble, increasing its compatibility with certain substrates or improving its function. It's challenging, but we enjoy working with our customers to find bespoke, rather than off-the-shelf, solutions to unique problems.

### **What are the benefits of working in Manchester and Hexagon Tower?**

This site, and the whole Manchester area, have a strong affinity with colour and chemicals, and it is a real advantage to be able to dip into the large pool of chemistry talent from the two main universities in the city when we are recruiting. There has been a lot of recent investment in the infrastructure of Hexagon Tower, which has helped us to be more efficient. We have a great relationship with the team there and they are very helpful, advising us on anything we need – whether that's extra storage space or expanding our facilities.



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To learn more about Colour Synthesis Solutions, visit [www.colour-synthesis.com](http://www.colour-synthesis.com).

To find out more about the facilities and opportunities at Hexagon Tower, visit

[www.hexagon-tower.co.uk](http://www.hexagon-tower.co.uk).

