Mike Rose has a glazed look

"I regard myself as a combination of artist and scientist which is why I've ended up in glazes," says Mike Rose, Technical Manager at Morris and James Pottery. Mike grew up and trained in the UK, working for four years at Royal Doulton after graduation. "My career path was really set when I worked in the Philippines for a social development project providing employment for leprosy patients. It was like a smaller version of Morris and James in that they dug the clay from behind the pottery and had really top-notch artist-potters. However, they didn't have anyone who knew how to formulate glazes so I had to make them right from first principles. That suited my temperament – I'm a chemist at heart."

After a move to New Zealand in 1983, Mike joined Morris and James in 1985 to help them progress from primarily terracotta pots and tiles, to glazed products. "They had experimented a bit with glazes but they had never put any of them into production so that was my main focus."

A glaze is a thin glass covering that melts in the kiln but doesn't become so fluid that it runs off the side of the pot. It needs to flow enough for the bubbles to clear and the surface to smooth off, but no more than that. "You have to know what you can blend and what you can't," Mike points out.

The art and science of it is to be able to choose the right mix of glazes and base colours to get the desired results. As most of the glazes appear creamy white or grey before firing, Mike and the designers need to be able to picture what the end result will be, even though they can't see it until it is fired. "We have to be able to produce precise results because we supply retailers all over New Zealand and they need to know that they will get a product that looks the same as their previous order." Experience is how Mike ensures they get the colours they want, but sometimes he still gets unexpected results. When that happens, he will examine the glaze under his binocular microscope and figure out what has happened. What our eye perceives as a single colour on the pot, shows up under the microscope as a kaleidoscope of colour blobs, swirls and clear glaze. Mike explains, "The glazing process at Morris and James is as complex as any you're likely to find. Most industrial potteries would not have the patience to do what we do."

After 30 years with Morris and James, Mike's current challenge is to train someone to take over when he retires. "At the moment, I'm the only person here who knows how to formulate glazes and that's a bit risky."

Dianne Redmond, who has a degree in biochemistry and is currently a pottery decorator at Morris and James, has stepped into that role. To assist with her training, Mike and Dianne have developed an array of glazed tiles to study colour combinations. "I'm very interested in colour theory and the psychology of how colour combinations affect people. How particular colours, when you put them together, leap to a new level. I want to have a background process whereby we look at colours as a whole and explore different combinations, and not always just react to trends." Next time you go to Morris and James, take the 11.30am tour with Mike and you will gain a real appreciation of the artistry of this chemist.