science LENS monthly

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INSIDE this issue

sciencelens.

PHOTOGRAPHING
SCIENCE, INDUSTRY
AND TECHNOLOGY

From the editor

WELCOME TO THE LAUNCH EDITION of **scienceLENS monthly**, a new photography newsletter brought to you by **Sciencelens Ltd**, provider of professional photographic services in the domains of science, industry and technology.

Through this newsletter, I hope to share my fascination for the visual side of science communication – the symmetry of mathematics, the structures of physics, the colours of chemistry, the fascinating visual phenomena of the biosciences and materials technology and the wonders of the biological and natural world.

Each month, I will discuss a couple of recent **Sciencelens** photoshoots. This month features coverage of the launch of a super-yacht from *Fitzroy Yachts* in New Plymouth, a challenging outdoor event that presented some wonderful photographic opportunities. I also feature some images from a corporate visit at the *Riddet Institute* at Massey University in Palmerston North.

You are receiving **scienceLENS monthly** because you are involved, either at a technical/academic level or as an event organiser, in the science and technology domain, and as such may at some point require the services of a science photographer. If you do not wish to receive this newsletter in future, please email me and I will remove you from the distribution list.

If you have any thoughts or suggestions regarding the newsletter or how it could be improved, please also pop me an email – I would love to hear from you.

Gerry

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Introduction to Sciencelens Ltd

Sciencelens Ltd is a newly established photographic company based in Palmerston North, New Zealand. The focus of Sciencelens is exclusively on photography in the domains of science, industry and technology.

Gerry le Roux, owner and main photographer of the company, has been operating as a science photographer for the past five years.

Before pursuing photography on a professional basis, Gerry worked as a scientist and researcher in the ICT domain at the Council for Scientific and Industrial Research (CSIR), a leading R&D institution in southern Africa. Working closely with scientists from a wide range of disciplines including bioscience, materials technology, ICT, environmental science, defence, and building & transport technology, led to an understanding and appreciation for the visual side of science.

When deciding to trade his science career for a career in photography, photographing scientists and science phenomena was therefore a logical focus domain.

Gerry is passionate about the use of photography as a visual aid in communicating science, and through **Sciencelens** he hopes to make a meaningful contribution in this field. This involves working closely with scientists and researchers as well as technical writers and communication specialists.

The photography done through **Sciencelens** broadly encompasses three fields, namely:

1. technical photography of science experiments, laboratory tools and equipment, and science phenomena,

2. photographic profiling of people in science, including coverage of scientists at work and portraiture in a science environment, and

3. coverage of science and technology related events such as corporate visits, conferences, demonstrations and launches.

Introduction to Sciencelens Ltd *(cont)*

Technical science photography

At a technical level, the main challenge of science photography is to accurately capture the scientific subject matter in a striking and visually arresting way without 'misleading' the viewer.

Creating a good science photograph comes back to the basics of good photography in general – composition, lighting and contrast management. At times the photography of scientific subject matter can be burdened by excessive use of special effects such as the use of coloured strobes to create a blue or green glow emanating from behind the subject. While subtle use of lighting remain one of the most effective and important 'tools' in photography, the trend has moved towards accuracy and correctness instead of special effects, with the focus rather being placed on how the subject can be represented in a striking, novel way using different angles, focal lengths and good composition.

Photographing experiments and science phenomena present wonderful opportunities to the science photographer to enhance the impact of his subject through good composition and visual design, and it is in this context that photography can become an invaluable science communication tool.

Photographic profiling of people in science

Profiling scientists at work is an area of photography that Gerry is particularly fond of, and therefore represents a large component of the **Sciencelens** offering. Coming to grips with the technicalities of the scientist or researcher's work and figuring out how to capture this visually can be quite complex. Add to this the human factor - staging the scientist in the image to form part of the composition, while at the same time making him or her feel at ease in front of the camera, and you have a photographic challenge that is tough, but at the same time very rewarding.

In terms of people profiling shoots, **Sciencelens** prides itself in the quality of its comprehensive portfolio, having created images for numerous client newsletters and reports.

Covering science and technology events

The third offering from **Sciencelens**, namely the photographic coverage of science and technology events, differs from the first two in the sense that it is less directly scientific, but it is still a critical link in the visual science communication chain.

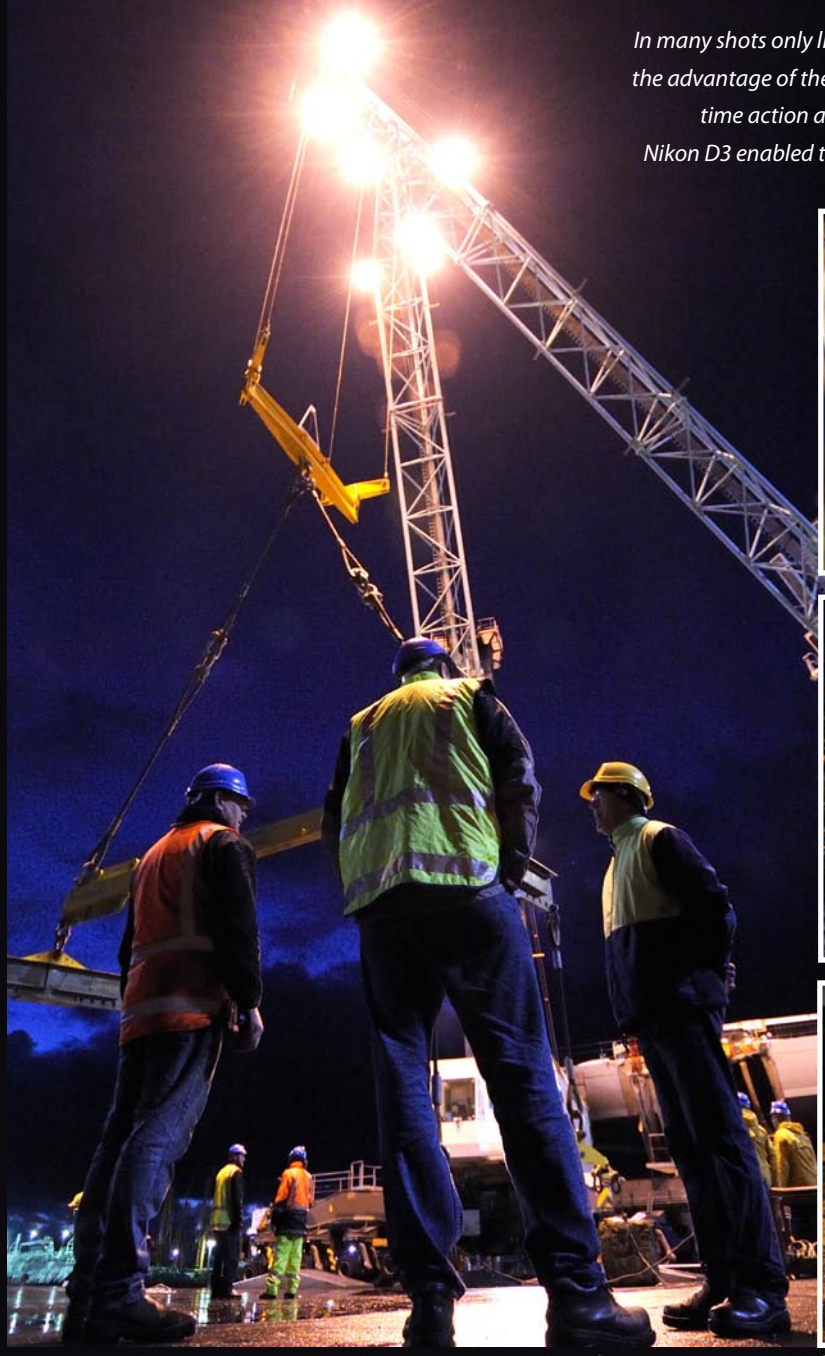
While the focus in this case falls on the discipline of events photography, having a scientific background still helps in identifying key photographic moments. And being able to understand and enjoy the presentation of the speaker being photographed, is definitely an added bonus for the photographer!

Years of covering launches, conferences and other events have helped Gerry develop the intuition to identify and photograph key moments, and to capture the character of the speaker. Technically, a key challenge in event photography lies in being able to use lighting and composition to capture not only the action of the speaker, but also the context that supports and defines the action. Another important factor is that the photographer is seldom in control of the environment (indoor/outdoor, size of the venue, position of the speaker, etc), and as such has to be flexible enough to make the most of any situation.

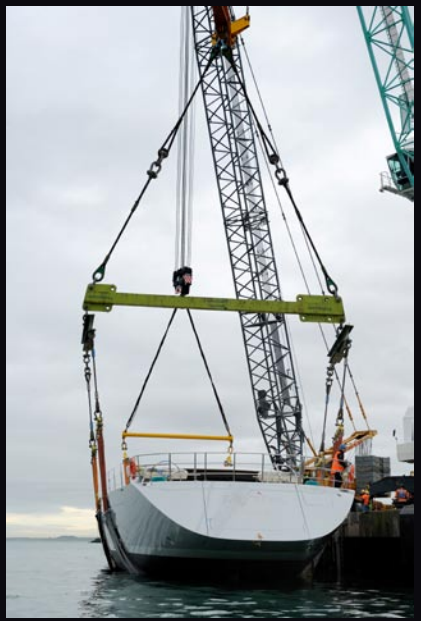
A MOST IMPRESSIVE SUPER YACHT was launched by New Plymouth yacht builders Fitzroy Yachts recently, and **Sciencelens** was there to provide photographic coverage of the event.

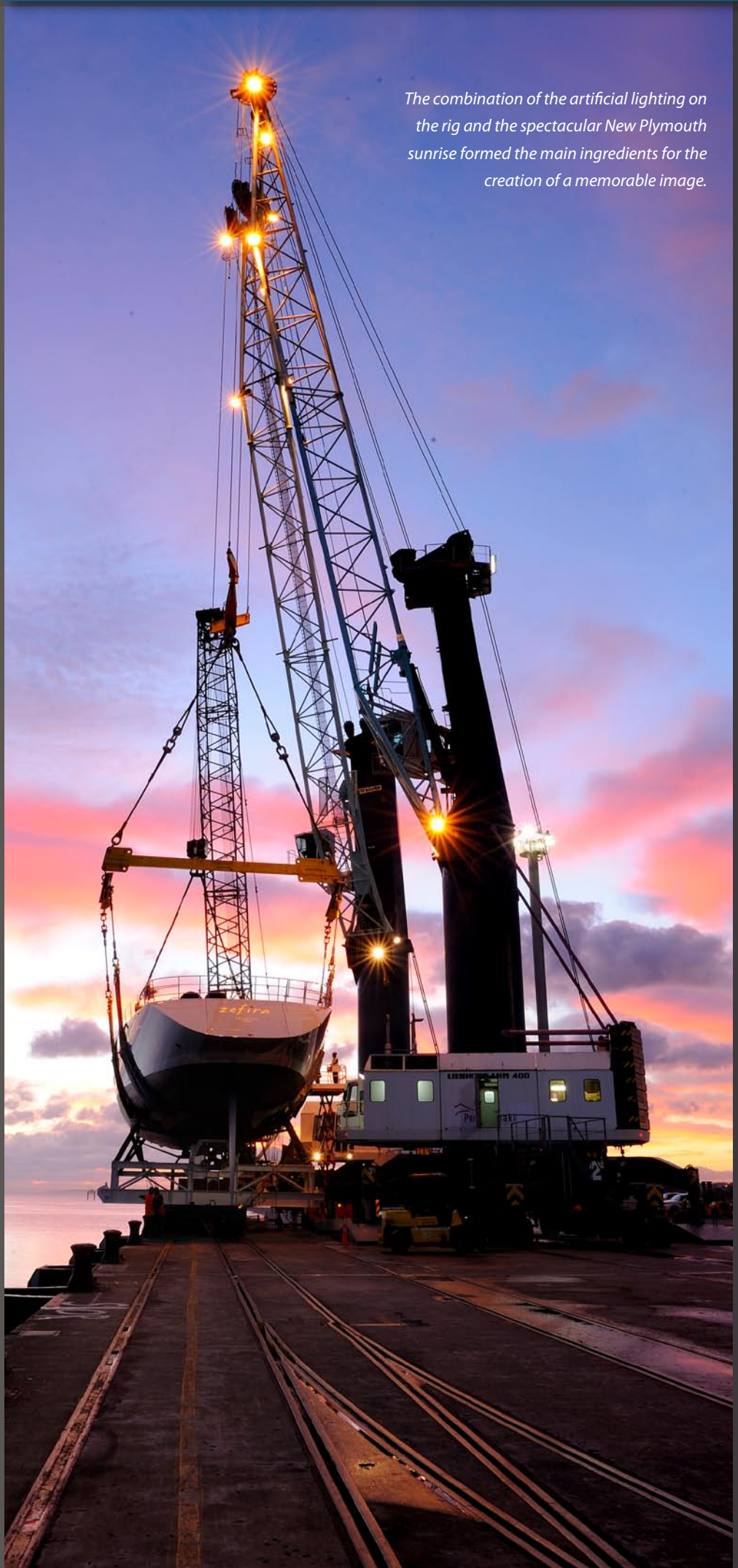
Photographing an outdoor event

In many shots only limited artificial light was available, and had to be used to the advantage of the image. The very directional light illuminating the night-time action at the port, combined with the low-light capabilities of the Nikon D3 enabled the creation of a strong set of images of workers in action.



As an event photographer it is critical to capture proceedings from interesting and different viewpoints. With the launch of the Zefira yacht, we had the opportunity to witness the launch from the water-level point of view, from a rubber duck. This enabled us to create a more interesting and comprehensive visual record to document the event. Luckily the weather held out until the yacht was safely in the water.





The combination of the artificial lighting on the rig and the spectacular New Plymouth sunrise formed the main ingredients for the creation of a memorable image.

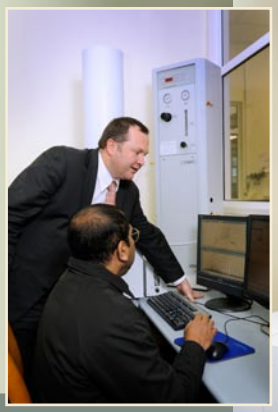
THE 50-METRE, 350-TONNE sailing super yacht, Zefira, was constructed for a key European client yacht owner who approached Fitzroy directly to build this very impressive vessel. Fitzroy Yachts managing director Rodney Martin said the yacht was big enough to hold eight crew and eight guests and had taken two years to complete.

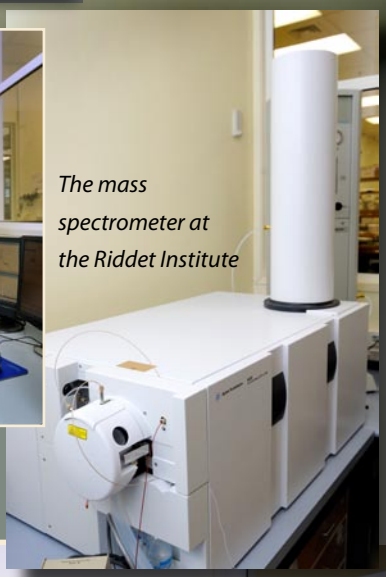
As reported in the *Taranaki Daily News*, Mr Martin said: "This year there will be only five to 10 sailing super yachts launched in the world and I think this will be the most impressive and we expect to win a number of awards with it next year."

After the launch, Zefira, with her light grey hull, had further fine tuning and finishing to be completed in Auckland before being delivered to her owner.

Launching a yacht of this size is a significant technical and logistical challenge, and the process from shipyard to sea took 3 days. As is often the case with extended outdoor events in New Zealand, the weather provided a number of photographic challenges, including rain and low light conditions. On the flipside, we were blessed with the most spectacular sunrises and sunsets, and the floodlit scenes at the harbour provided some wonderful photographic opportunities.

The sheer size of the yacht was another significant factor in the photographic coverage of the event, often dictating the angles and positions from which to shoot, as well as the choice of lens.





The mass spectrometer at the Riddet Institute

The lighting setup for the Riddet Institute laboratory shoot was by means of a diffused off-camera flash to create softer and more directional lighting. The two similar but different shots above allow the client the choice of a posed people-focused image, or a more action-oriented image.

Photographing a corporate visit

DURING A RECENTLY COMMISSIONED PHOTO SHOOT, **Sciencelens** provided photographic coverage of a corporate visit at The Riddet Institute, Massey University.

The Institute was visited by a delegation from the ZESPRI innovation team. They were hosted at Riddet by the Institute's co-director, Professor Paul Moughan.

The ZESPRI delegation was photographed during a tour of the Riddet laboratory facilities.

www
going on-line

AUGUST 2010 SAW THE LAUNCH of the **Sciencelens** website, www.sciencelens.co.nz, showcase of the photography of Gerry le Roux. The site, designed and developed by **Sciencelens** partner and graphic designer Wouna le Roux, also introduced the company logo with descriptor, "**Sciencelens** – *photographing science, industry and technology*", which succintly encompasses the focus of Gerry's photography.

In addition to regular website features such as "About" and "Contact us", the main focus of the site is a collection of 24 photographic galleries, grouped under the following categories:

- ***Science in action*** – these galleries illustrate the photographic profiling of people in science, including coverage of scientists at work and portraiture in a science environment. Sub-galleries are grouped according to application domain
- ***Science images*** – these galleries showcase the technical photography of science experiments, laboratory tools and equipment, and science phenomena. Again sub-galleries are grouped according to application domain
- ***Events*** – the third set of galleries highlights **Sciencelens'** coverage of science and technology related events such as corporate visits, conferences, demonstrations and launches
- ***Corporate portraiture*** – falling somewhat outside the science domain, but still in most cases done on commission from science and technology organisations, the corporate portraiture gallery showcases traditional, formal corporate portraiture as well as more informal and relaxed corporate photographs
- ***Science kids*** – this is a new and fresh focus area. Photographing the wonder of scientific discovery among children is a highly satisfying endeavour, and one that will actively be developed in future. Watch this space!

Every attempt will be made to keep developing and updating the content of the **Sciencelens** website, and newsworthy items and current events will also be incorporated. Progress and development of the website will be highlighted in future editions of **scienceLENS monthly**, so please do check back regularly.

Quote of the month:

In her interview in Bruce Mau's book 'Massive Change', Felice Frankel, science photographer and Senior Research Fellow at Harvard Univerisity talks about how NASA is bringing attention to the earth through satellite images. She states:

"Chemists and physicists need to do the same for the micro and the subatomic world. It is just as exciting and beautiful as the cosmos".

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