



Case Study: Plant Growth at IGER

A major new facility, allowing studies of plant growth and development under careful environmental conditions has been opened at IGER, Institute of Grassland and Environmental Research, Aberystwyth, Wales, UK.

The facility is the most advanced of its kind in Wales and provides a boost to IGER in securing its position as a leading centre worldwide for research into the genetics, breeding, physiology, agronomy and ecology of plants and micro-organisms.

"This new facility will considerably aid our studies aimed at understanding how environmental conditions affect plant growth" said Professor Pollock from IGER. "This information can be used, for example, in breeding programmes to develop new grasses and cereals better adapted to growing under conditions involving adverse temperatures or poor availability of water or light" he added.

The controlled environment units were supplied by Sanyo-Gallenkamp PLC and the light sensors by Skye Instruments Ltd.



Gallenkamp Environmental Simulation Ltd, previously the environmental business of SANYO Gallenkamp PLC, is proud of its involvement with the new plant growth facility at IGER. As the world's leading supplier of Controlled Environments for the plant growth and pharmaceutical stability industries, it is fitting that the company supplied all the CE facilities to such a prestigious installation.

The facility required close control of temperature and humidity over an extended performance envelope. In addition the specification required tightly controlled, high light levels at lower temperatures than are generally considered achievable using

the fluorescent lighting required by the users.

Skye light sensors are being used for controlling and monitoring in the medium and low temperature rooms. Two PAR Quantum sensors are used side by side under each array of lights. One is for controlling the light level whilst the second provides an independent datalogged record of actual light levels in the growth chambers.

In addition to drawing on its vast experience of such installations, Gallenkamp also took the opportunity to incorporate fresh approaches, and new technologies, in order to fully achieve the demanding specifications at a commercially attractive price. This innovative approach is backed up by a comprehensive service and maintenance package.



Acknowledgements and Contacts

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Skye Instruments Ltd

21, Ddole Enterprise Park, Llandrindod Wells, Powys LD1 6DF, United Kingdom

TEL: +44 (0)1597 824811 EMAIL: skyeemail@skyeinstruments.com WEB: www.skyeinstruments.com