

**Welcome address:**

**Remote sensing, RSPSoc and Rolf Harris – a research student experience**

Paul Aplin  
University of Nottingham,  
Chairman of RSPSoc

My main aim in this address is to provide what pointers I can for students undertaking research degrees in remote sensing and photogrammetry, drawing on my own experiences – some time ago, but it's nice to reminisce! I'll outline my doctoral research in object-based classification using fine spatial resolution imagery, also describing recent developments in these areas. Beyond research, I'll comment on broader student issues. In particular, I'll provide an introduction to the Remote Sensing and Photogrammetry Society, outlining the various opportunities available for students. To be honest, Rolf Harris didn't play a very big part in my PhD, but he was involved – to find out how, you'll have to come along to the talk!

**Keynote 1:**

**Development in Photogrammetry and Remote Sensing in a Changing World**

Ian Dowman  
Professor of Photogrammetry and Remote Sensing  
University College London  
President ISPRS

Geospatial Sciences provide a technical foundation for many forms of development, particularly for storage and communication of spatial data. New technologies for the acquisition and management of spatial data are being introduced all the time. Since the paradigm shift in imaging technology from analogue to digital, these developments have caused fundamental changes to way in which geospatial data is handled and analysed. At the same time as these technical changes have been introduced, international agencies and nations have recognised that technological development must be linked to the needs of society, particularly, for example, to the United Nations Millennium Development Goals. Organisations such as the Group on Earth Observations (GEO), have been set up to co-ordinate the collection and distribution of Earth observation data for the benefit of society, and NGOs such as ISPRS, have worked with other to organisations to promote this aim.

This presentation will review the technical developments in photogrammetry and remote sensing which make geospatial data more accessible and more useful to society, and discuss the organisations which work together to ensure that the data is delivered to those who need it, and that tools and training are available to optimise the use of the data. The presentation will also look at how RSPSoc and ISPRS fit into these developments and how future generations can contribute to the development.

**Keynote 2:**

**Helping teach tomorrows experts**

Richard Goodman  
Earth Imaging Solutions, Intergraph

Recognizing the increasing importance of a close partnership between academia and developers of leading technology, Intergraph offers robust academic programs for higher education. These programs have been developed in close collaboration with the academic community and are designed to support the advancement of innovative research and teaching and to ensure the recognition of academic excellence. At Intergraph, we realize that the future of our organization and that of education are intertwined inexorably, and that through working together, we can build a more solid foundation for advancing the role of spatial information management. Through the presentation examples of this collaboration will be discussed.

**Keynote 3:**

**Mapping Support for Mine Operations in Papua, Indonesia**

Alexander Koh  
Managing Director of Geotechnologies and  
Principal Lecturer at Bath Spa University

The availability of timely, cloud free, high resolution digital aerial imagery with Ground Sample Distances ranging from 15cm to 50cm, is considered by many mining operators as an essential source of information for the safe and efficient development, management, and operation of large mine facilities. This presentation aims to generate awareness of a robust, low maintenance and economic system that is currently deployed to support the mapping requirements of such operations in Papua, Indonesia. Digital image data captured from the system, developed and installed by Geotechnologies, is used for the generation of digital elevation models and contoured orthophoto maps that are ready for immediate integration into existing geographic information systems. The system accepts commercial off the shelf digital cameras that are installed on mounts, capable of compensating for roll, pitch and heading excursions. Global Positioning System data in NMEA format fed directly into the system is logged and attributed with camera activity to aid image data management, and allow rapid reconnaissance photomosaics, and orthophotmaps to be produced. The design of the system allows rapid installation across fixed and rotary winged platforms. This presentation will include a live demonstration of the aerial imaging system and processing software