# IPHT wins prestigious Mining Research Award For introducing the World's most sensitive Magnetic Sensor to Geophysical Exploration

**London**, **England**, **Nov 21**, **2007** – The Institute for Photonic Technologies (IPHT) of Jena, Germany, is proud to announce, that the Institute was awarded first prize by the publishers of the renowned *Mining Journal* which was first published in 1835, for their groundbreaking research in the field of geomagnetic surveying systems, during the annual *Mines and Money* Conference held in London on 21 and 22 November. These new generation sensors are capable of detecting minerals and precious metals that were deemed "undetectable" before.

The award to IPHT was adjudicated by an international panel of experts, who cited IPHT for primary research that is expected to have the highest impact for exploration and mining in the future.

### Leading Edge Technology

IPHT's world's first Full Tensor Airborne Magnetic Gradiometer, known by its synonym "JESSY STAR", has surpassed all existing technology in performance and, in addition, provides the exploration community with magnetic data never measured before. The most prominent achievement of the research and development work is the utilisation of the ultimate sensitivity of a Superconducting Quantum Interference Device (SQUID) for geomagnetic exploration.

JESSY STAR has to date flown hundreds of hours in both helicopter mode and fixed wing plane configuration. It has proven its superiority above all conventional systems and clearly transforms exploration from "flying blind" to "seeing clearly".

Similar breakthrough results were achieved with the complementary JESSY DEEP System, which is deployed as a ground EM system. (JESSY is the synonym for "Jena Squid System").

Supracon, which is the commercial and marketing arm of IPHT, will market this breakthrough technology during the first guarter of 2008.

Based on the expertise in SQUID sensor technology, IPHT is fast becoming the partner of choice for major resource companies demanding greater certainty and value for their exploration and property management dollars.

#### Collaboration with mining industry

Anglo American Corporation, a global leader in mining, along with De Beers, the world's largest diamond company, have already chosen IPHT and Supracon for their next-generation airborne surveys and entered into a strategic agreement, after reviewing alternative systems presently on the market or still in development phase.

Accepting the *Outstanding Achievement Award* in the category *Mining Research* in London, IPHT Head of Quantum Detection Department and co-founder of Supracon Dr. Hans-Georg Meyer said: "The new system's extraordinary sensitivity and the tensor information will provide a whole new dimension to exploration capabilities and will surely result in new discoveries for the good of the whole mining industry."

The attached backgrounder contains images and details showing the JESSY STAR performance.

About IPHT, Inc: Since its foundation in 1992, the IPHT has conducted leading research and development in SQUIDTechnology, receiving worldwide appreciation. IPHT is based in Jena, Germany. With a team of over 40 scientist and engineers, the Department of Quantum Detection is developing detectors and measuring systems, performing at the quantum limit. The development and manufacture of detectors are based on advanced micro- and nanotechnologies. The detectors are integrated into novel measuring systems such as JESSY STAR and JESSY DEEP.

To keep and to even further expand its leading position in geomagnetic instrumentation IPHT has recently decided to develop a new generation of ultra sensitive optically pumped magnetometers being based on advanced photonic technologies.

**About Supracon**, **Inc:** Supracon was founded in 2001 as a spin-off from the Department of Quantum Detection at IPHT. The company is a globally operating high tech company which has specialized in the development, fabrication, and marketing of ultra-sensitive superconductive sensors and measuring systems with a focus on geophysical measuring systems.

## About *Mines and Money* Conference and the *Mining Journal*

*Mines and Money* has rapidly established a reputation as the leading mining and investment event in London. This up to date and informative conference and exhibition, brings miners, financial institutions, investors and professional services together and provides a direct platform to negotiate and conduct resource based business.

Organised by the publishers of *Mining Journal*, and featuring the Outstanding Achievement Awards Presentation Dinner on 21 November, *Mines and Money* is one of the most exciting and best connected events in the world." (extracted from the conference website)

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