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## **MagiQ Technologies Unveils Corporate Advisory Board**

*Pioneers to help MagiQ Bring the benefits of Quantum Physics to the Technology Marketplace*

**NEW YORK, NY - MAY 2, 2006** – MagiQ Technologies, Inc., *the* quantum information processing (QIP) company, today made public its Board of Advisors. This distinguished group includes leaders in optical science, encryption, and academia. They will work closely with MagiQ to support its ongoing commercialization of next-generation quantum cryptography products.

The Advisory Board will consist of Professor Artur Ekert, one of the inventors of quantum key distribution and the Leigh Trapnell Professor of Quantum Physics at the University of Cambridge; Dr. Burt Kaliski, Vice President of Research, RSA Security & Chief Scientist, RSA Laboratories and a renowned authority on cryptography; Dr. Norbert Lütkenhaus, one of the world's experts in QKD and Associate Professor at the Physics Department of the University of Waterloo and a member of the Institute of Quantum Computing; and George Heron, a leading expert on the application of security and vice president and chief scientist at McAfee, Inc.

"When working on the leading edge as we are, and promising our customers uncompromising security, it is essential to seek the input, advice, and counsel of the best minds in the business," said Bob Gelfond, CEO of MagiQ Technologies. "Their profound thinking about quantum physics, supplemented by their detailed understanding and expertise in quantum and classical cryptography form a wealth of knowledge, experience and credibility that will serve to further strengthen MagiQ."

Members of MagiQ's Advisory Board will help the company formulate its R&D strategy, cultivate and expand product and research plans, secure new customers, and develop and acquire additional intellectual property in the QIP arena.

"In my years of advising both public and private sector organizations about cutting edge technologies, I have been exposed to myriad ideas that were poised to have a significant impact," said Professor Artur Ekert, founder of the Oxford University Centre for

Quantum Computation and a MagiQ advisor. “Undoubtedly, quantum cryptography stands to have the most significant impact of them all, and the experience of the MagiQ team positions them to best capitalize on this incredible opportunity.”

Burt Kaliski, Vice President of Research, RSA Security & Chief Scientist, RSA Laboratories and MagiQ advisor said, “It is exciting to see quantum key distribution being put into practice. Quantum key distribution, in combination with strong, classical cryptography, offers something that is much needed for systems being built for long-term security: encryption that resists the threat of rapidly increasing computing power and potential future improvements in classical cryptanalysis.”

## **Advisory Board Members & Backgrounds**

### **Professor Artur Ekert**

Professor Ekert is one of the pioneers in the field of QIP and one of the inventors of QKD. His 1991 paper on entanglement-based quantum key distribution is the most cited paper in quantum cryptography. In the field of quantum computation, Professor Ekert has contributed several important results ranging from mathematical analysis of quantum algorithms to proposals for experimental realizations of quantum logic gates.

Artur Ekert is the Leigh Trapnell Professor of Quantum Physics at the Department of Applied Mathematics and Theoretical Physics (DAMTP), University of Cambridge. He is also a Distinguished Professor at the National University of Singapore. For his independent discovery of quantum cryptography he was awarded the 1995 Maxwell Medal and Prize by the British Institute of Physics. In addition, Professor Ekert was a co-recipient of the 2004 European Union Descartes Prize. Artur Ekert has worked with and advised several companies and government agencies and has made a number of contributions to quantum information science. Since 1992 he has been in charge of the Oxford University based Quantum Computation and Cryptography Research group which has evolved into the Centre for Quantum Computation, now based at DAMTP in Cambridge.

### **Dr. Burt Kaliski**

Dr. Kaliski is the director of RSA Laboratories and chief scientist of RSA Security. He is one of the world’s foremost experts on classical cryptography. He joined RSA Data Security when it was a startup in 1989 and in 1991 helped launch RSA Laboratories as an academic environment within RSA Data Security.

Kaliski has also been involved extensively in the development of cryptographic standards. During the early days of RSA Laboratories, he coordinated the development of the Public-Key Cryptography Standards, working with major early adopters of public-key cryptography. From 1993-99, he served as chair of the IEEE working group that developed the IEEE 1363-2000 standard, which covered the three main families of public-key cryptography. Since 1999, he has been the editor of the IEEE P1363a amendment and is currently the editor of ANSI X9.44, the emerging banking standard

for key establishment based on the RSA cryptosystem. He has also authored several Internet RFCs.

Kaliski's research has included public-key cryptography, efficient implementation of cryptographic algorithms, block cipher cryptanalysis, elliptic curve cryptography, user authentication, and privacy protection. He is an inventor on eight patents with several others pending. He received his bachelor's, master's and Ph.D. degrees in computer science from MIT, where his research focused on cryptography. Prior to joining RSA Data Security, he was a visiting Assistant Professor of computer engineering at Rochester Institute of Technology. He is a member of the IEEE Computer Society and the International Association for Cryptologic Research.

### **George Heron**

George Heron serves as vice president and chief scientist at McAfee, Inc. In this role, Heron leads product initiatives, furthers product architecture development, and drives product research. Heron joined McAfee(R) with more than 30 years of management experience in software and hardware product development. Most recently he was CTO at SafeNet, where he led the company's initiatives for incorporating new products and partners into their product lines of VPN clients, network security appliances, security management and identity management.

George Heron joined SafeNet in March 1999. In this position, George was responsible for developing new and enhanced network security products as well as contributing insight about technology trends and new product opportunities in VPN, Internet and electronic security fields. He specializes in organizational and productivity turnaround management with demonstrated success in bringing new products from initial concept to final product launch. Prior to joining SafeNet, George was a Director of Product Development at Dialogic Corporation, where he was responsible for leading the System Software Development Team. He was responsible for developing telephony-based products for the telecommunications industry and oversaw divisions responsible for client-server product development and advanced system architecture.

George holds a BSEE degree from the Rochester Institute of Technology, an executive MBA from Babson College in Massachusetts and has completed advanced studies in computer science.

### **Dr. Norbert Lütkenhaus**

Norbert Lütkenhaus studied at the RWTH Aachen and the LMU Munich, from which he graduated with a thesis in general relativity. He then changed fields to study quantum optics and quantum cryptography under the supervision of Stephen M. Barnett at the University of Strathclyde, Scotland, UK. In 1996 he obtained his PhD. After postdoc positions in Innsbruck (Peter Zoller and Ignacio Cirac) and the Helsinki Institute of Physics (Kalle-Antti Suominen), he worked for MagiQ Technologies (New York) to initiate the project of commercial realization of quantum key distribution. Returning to academia in 2001, he built up and led an Emmy-Noether Research Group at the University of Erlangen-Nürnberg, during which time he did his habilitation (2004).

Currently he is Associate Professor at the Physics Department of the University of Waterloo and a member of the Institute of Quantum Computing.

**About MagiQ Technologies, Inc.**

MagiQ Technologies ([www.maqitech.com](http://www.maqitech.com)) is *the* quantum information processing (QIP) company. Through its unique blend of science, business and engineering expertise, the Company is the first to commercialize the advancements in quantum information to benefit forward-looking organizations seeking competitive advantage through technology. Founded in 1999, MagiQ is a privately-held company headquartered in New York City with research & development laboratories in Somerville, Mass.

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