International coveted award in the field of microelectronics

International coveted award in the field of microelectronics
The head of the Institute for Nano and Microelectronic Systems (INES) at the University of Stuttgart and Director of the Stuttgart Institute for Microelectronics (IMS CHIPS), Prof. Joachim N. Burghartz, is being presented with the J.J. Ebers Award. This prestigious special award in the field of microelectronics is thus being awarded to a European researcher again for the first time in over 30 years. Prof. Burghartz is being awarded the prize for his work on coils integrated on silicon chips and for the development of technologies and applications of ultra-thin silicon chips in flexible electronics. The prize awarded by the IEEE Electron Devices Society, the worldwide association of electrical engineers, will be officially awarded on 15th December 2014 in San Francisco at the opening of the globally leading International Electron Devices Meeting (IEDM).
Prof. Wolfram Ressel, Rector of the University of Stuttgart offered his congratulations on the award and said: "The award presented by J.J. Ebers Awards to Joachim Burghartz is a source of great pleasure to us. It is initially the personal recognition of the great research work performed by Professor Burghartz. However, it is moreover evidence of the excellent achievements in microelectronics at the science location of Stuttgart. "
Nils Schmid, Minister for Economic Affairs in the State of Baden-Württemberg, congratulated Prof. Burghartz: "I congratulate Professor Burghartz on his excellent research work finding such wide recognition internationally. This success proves the quality of this top-class research performed at our economy-oriented research institutes in Baden-Württemberg."
The breakthrough on the integration of coils on a silicon chip can be traced back to Burghartz research work at IBM in the USA and a publication at the IEDM in 1995. This contributed to laying the foundation for todays chips in the field of wireless communication technology that is used in mobile phones, laptops and many other electronic products. In the 10 years following this, during IBM research in the USA and at the Delft University of Technology in the Netherlands, Burghartz promoted the technology of the communication chip with other decisive contributions. After moving to Stuttgart in 2005 in order to head the Institute for Microelectronics Stuttgart (IMS CHIPS), an institute in the Innovation Alliance Baden-Württemberg (innBW), and simultaneously the Institute for Nano and Microelectronic Systems (INES) at the University of Stuttgart, he dedicated his energies to the manufacturing, characterisation and application of ultra-thin silicon chips for flexible electronics. This new technology also has the potential for innovative electronic products, such as, e.g. flexible TV screens. Joachim Burghartz received the State Research Prize Baden-Württemberg in 2009.
Both contributions mentioned in dedicating the award have a special significance for the objectives of "Industrie 4.0", the fourth revolution in industrial automation, in which German industry sees a unique opportunity to further expand the international leadership in mechanical engineering, in automobile production and in many other sectors. The basis of this change in direction concerns sensor chips that are able to transmit measurement data in a wireless way and that can be attached to components flexibly and with minimum space requirements. This enables products to be personalised in volume production and produced in good time, as well as internationally distributed production chains being able to be controlled in an optimum way.
About Prof. Burghartz:
Joachim Burghartz was born in Aachen in 1956. He studied electrical engineering at the RWTH Aachen, graduating as a qualified engineer (Dipl.-Ing.) in 1982. He obtained his doctorate in 1987 from the University of Stuttgart. He subsequently joined the internationally renowned research laboratory of IBM, T.J. Watson Research Center in New York in the USA, for 11 years. Then he worked as a full professor for 8 years at Delft University of Technology in the Netherlands, where he was also the scientific director of the inter-faculty Micro-Electronics Institute DIMES for four years. He returned to Stuttgart in 2005. Today he heads the Institute for Nano and Microelectronic Systems (INES) at the University of Stuttgart as a full professor, as well as the Stuttgart Institute for Microelectronics (IMS CHIPS), an institute in the Innovation Alliance Baden-Württemberg (innBW).

Contact:
Dr. Hans-Herwig Geyer, Head of University Communication and Press Spokesperson, University of Stuttgart,
Tel.: 0711/685-82555, Email: hans-herwig.geyer [at] hkom.uni-stuttgart.de
<img src="http://www.pressrelations.de/new/pmcounter.cfm?n_pinr_=577197" width="1" height="1">

Pressekontakt

Universität Stuttgart

70174 Stuttgart

Firmenkontakt

Universität Stuttgart

70174 Stuttgart

Die Universität Stuttgart liegt inmitten einer hochdynamischen Wirtschaftsregion mit weltweiter Ausstrahlung, einer Region, die sich auf den Gebieten Mobilität, Informationstechnologie, Produktions- und Fertigungstechnik sowie Biowissenschaften profiliert hat. Die Stuttgarter Hochschule, die im Jahr 2004 ihr 175-jähriges Jubiläum feierte, wurde 1829 zu Beginn des industriellen Zeitalters in Europa gegründet. Die Kooperation zwischen technischen und naturwissenschaftlichen sowie und geistes- und sozialwissenschaftlichen Fachrichtungen zählte immer zu der besonderen Stärke der Universität Stuttgart. Mit diesem Anliegen hat sie sich zu einer modernen leistungsorientierten Universität mit umfassendem Fächerkanon und einem Schwerpunkt in den technischen und naturwissenschaftlichen Disziplinen entwickelt. Nicht ?Berufsqualifizierung allein ist die Maxime, sondern ?Technik, Wissen und Bildung für den Menschen lautet der Wahlspruch der Universität Stuttgart.