



## PRESS RELEASE

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### **mirSense signs infrared spectrometry agreement with Alcatel-Lucent, Thales and CEA-Leti**

Alcatel-Lucent, Thales and CEA-Leti have signed a memorandum of understanding with mirSense, a start-up formed by Mathieu Carras and Mickael Brun, to market a disruptive technology developed by their joint research unit, III-V Lab. mirSense will manufacture miniaturised tunable laser sources that are expected to revolutionise the infrared spectrometry market.

Infrared spectrometry has a wide range of applications (industrial, environmental, security and medical) as a quick and reliable way to identify organic molecules, but current systems are so large and costly that they can only be used in a laboratory setting.

mirSense will apply research into Quantum Cascade Lasers (QCL) conducted by the III-V Lab, combined with a unique silicon photonic technology in the medium infrared band, to produce electro-optical components of a completely new type. The new components will make it possible to develop affordable, ultra-compact chemical analysis systems to monitor gas emissions, detect hazardous substances or analyse bio samples.

Under the terms the memorandum of understanding, mirSense will further develop the research begun by the III-V Lab. The company can already count on public founded research contracts and expects to book firm orders and make its first product shipments this year, helping to finance future growth and development.

#### **About the mirSense**

mirSense is an SAS capitalised to 50 000€ created in January 2015. An operating team of 10 researchers coming from III-V semiconductors and Silicon research and industry has already been constituted. mirSense is divided into two operating sites located in Palaiseau for the Laser research activity and in Grenoble for the Si research and products industrialisation. We have access to clean room facilities through a strong partnership with III-V Lab for manufacturing our innovative semi-conductor devices and we rely on a joined development program with CEA Leti to prepare the next product generation. Website: <http://www.mirsense.com>





## About the III-V Lab

The III-V Lab is a joint research unit operated by Alcatel-Lucent, Thales and the French atomic energy commission (CEA) and focusing on electro-optical and microelectronic components using III-V semiconductor technology on silicon. The III-V Lab has been a Groupement d'Intérêt Economique (business partnership) since 2004. A total of 120 researchers in the Paris region work at the lab in partnership with CEA-Leti researchers in Grenoble. The unit's advanced prototyping and pre-production resources help drive the development of high added-value technologies that are subsequently used in industrial applications by the parent companies or their partners.

## About Alcatel-Lucent (Euronext Paris and NYSE: ALU)

Alcatel-Lucent is the leading IP networking, ultra-broadband access and cloud technology specialist. We are dedicated to making global communications more innovative, sustainable and accessible for people, businesses and governments worldwide. Our mission is to invent and deliver trusted networks to help our customers unleash their value. Every success has its network. For more information, visit Alcatel-Lucent on: <http://www.alcatel-lucent.com>, read the latest posts on the Alcatel-Lucent blog <http://www.alcatel-lucent.com/blog> and follow the Company on Twitter: [http://twitter.com/Alcatel\\_Lucent](http://twitter.com/Alcatel_Lucent)

## About Thales

Thales is a global technology leader for the Aerospace, Transport, Defence and Security markets. With 61,000 employees in 56 countries, Thales reported sales of €13 billion in 2014. With over 20,000 engineers and researchers, Thales has a unique capability to design and deploy equipment, systems and services to meet the most complex security requirements. Its unique international footprint allows it to work closely with its customers all over the world. [www.thalesgroup.com](http://www.thalesgroup.com) / @Thalespress

## About CEA-Leti (France)

As one of three advanced-research institutes within the CEA Technological Research Division, CEA-Leti serves as a bridge between basic research and production of micro- and nanotechnologies that improve the lives of people around the world. It is committed to creating innovation and transferring it to industry. Backed by its portfolio of 2,800 patents, Leti partners with large industrials, SMEs and startups to tailor advanced solutions that strengthen their competitive positions. It has launched 54 startups. Its 8,500m<sup>2</sup> of new-generation cleanroom space feature 200mm and 300mm wafer processing of micro and nano solutions for applications ranging from space to smart devices. With a staff of more than 1,800,





Leti is based in Grenoble, France, and has offices in Silicon Valley, Calif., and Tokyo. Follow us on [www.leti.fr](http://www.leti.fr) and [@CEA\\_Leti](https://twitter.com/CEA_Leti).

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