

## Joint research lab for SAL & Carinthia University of Applied Sciences

**With the signing of the cooperation agreement between Silicon Austria Labs GmbH (SAL) and Carinthia University of Applied Sciences (CUAS), the research lab for Radio Frequency Front-Ends (RFFE) has been launched in Villach. Here, new technologies in the high-frequency range will be developed in the future.**

Villach, 12.07.2019 – With the signing of the cooperation agreement by the management of SAL and Carinthia University of Applied Sciences, a new research lab for Radio Frequency Front-Ends has been launched at CUAS in Villach. Researchers at the joint lab are working on high-frequency technologies and new solutions for wireless communication in 5G and WLAN. The research group of the Josef Ressel Center at the University of Applied Sciences Carinthia has already been researching these key technologies for the wireless communication of the future. This excellent research activity has now led to a joint research lab with SAL. Via industrial companies, the innovations sought in the lab can be applied internationally.

### ACADEMIC KNOW-HOW MEETS APPLIED CUTTING-EDGE RESEARCH

The basic idea of the Uni-SAL Labs, which will also be established at other university institutions in the near future, is the pooling of academic know-how and the competences of the top research center in the field of EBS (Electronic Based Systems). "With the 'Uni-SAL Labs' concept, we pursue SAL's goal of rapidly building high-quality research expertise and achieving scientific excellence in the medium term. Universities and SAL can share research infrastructure and leverage each other's research achievements, a real win-win. I am pleased that with the RFFE Lab in Villach, we have launched the first lab in Austria with this concept," Dr. Thomas Lüftner, RF Systems Head of Division at SAL, explains.

All participants benefit from the cooperation: "The RFFE Lab of SAL and FH Carinthia combines science with applied cutting-edge research and is another important building block of CUAS in the field of EBS," DI Siegfried Spanz, Managing Director of Carinthia University of Applied Sciences, explains. "As a partner of Silicon Austria Labs, we cooperate with high-profile companies and institutions and play a decisive role in shaping the research landscape in the field of electronics and microelectronics," Spanz continues.

Through the cooperation between SAL and CUAS as well as the joint development of new technologies, other partners should be attracted. "With this lab, we are creating the competence for joint research with industrial partners," Werner Luschnig, Managing Director of Silicon Austria Labs, says. "In the high-frequency range for 5G base stations and WLAN gateways, we will develop new integration technologies that will lead to higher transmission rates, higher reliability and lower output performance."

### NEW RESEARCH FIELDS FOR VILLACH

For the SAL site in Villach, the research lab also means an expansion of competences. "With the RFFE Lab, we can expand our traditional areas of expertise in sensor technology and system integration in Villach with an essential area, radio frequency technology," Dr. Christina Hirschl, Sensor Systems Division Manager and SAL Site Manager in Villach, says. "The synergies with Carinthia University of Applied Sciences will create many new opportunities for cooperations and we look forward to working together."

**PRESS RELEASE**

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Manager of the RFFE Lab is Dr. Johannes Sturm, professor at CUAS and SAL RFFE Research Unit Head. "For years, high-frequency circuits have been researched at the Carinthia University of Applied Sciences as part of the 'Josef Ressel Center for Integrated CMOS RF Systems and Circuits Design'," Sturm explains: "In the joint research lab (RFFE Lab) of CUAS and SAL, the existing know-how can be further developed and expanded and thus taken to a new level of national and international research competence. The RFFE Lab is researching new concepts for integrated high-frequency circuits and integration technologies for use in Radio Frequency Frontends (RFFE)". According to Sturm, the planned research priorities are an important prerequisite for the realization of future communication systems such as 5G.

With the signing of the cooperation agreement between SAL and CUAS, the partners are making a significant contribution to the further development of radio frequency technologies. 12.07.2019 – Mit der Unterzeichnung des Kooperationsvertrags durch die Geschäftsführung der SAL und der FH Kärnten wird ein neues Research Lab für Radio Frequency Front-Ends an der FH Villach ins Leben gerufen. Im gemeinsamen Lab wird an Hochfrequenztechnologien und neuen Lösungen für die drahtlose Kommunikation in 5G und WLAN gearbeitet. Durch die Forschungsgruppe des Josef Ressel Zentrums der FH Kärnten wurde bereits an diesen Schlüsseltechnologien für die drahtlose Kommunikation der Zukunft geforscht. Diese exzellente Forschungstätigkeit mündet nun in einem gemeinsamen Research Lab mit SAL. Die im Lab angestrebten Innovationen können über Industrieunternehmen international zur Anwendung kommen.