

## PRESS RELEASE

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### Farewell and a new start: 11 years of antenna coating at the Fraunhofer IST

**On 3<sup>rd</sup> September, the time had finally come: After eleven years, Project Manager Torsten Hochsattel held in his hands the – for the time being – final antenna component for the Sentinel-1C and D missions to be coated by him and the galvanic team from the Fraunhofer Institute for Surface Engineering and Thin Films IST.**

Since 2008, carbon fiber-reinforced plastic (CFRP) waveguides for the radar-antenna systems of the Sentinel-1 satellites have been metalized at the Fraunhofer IST. For this purpose, a special galvanic process was developed in which the waveguides were given a wafer-thin coating of copper, both internally and externally. The first two missions have already demonstrated that the coatings are able to withstand the extreme temperature fluctuations in space.

More than 2500 waveguides were furnished with the high-performance copper coating at the IST. Torsten Hochsattel participated from the very beginning. "We rebuilt the laboratory and the entire facility in order for our process to qualify for the high demands of the aerospace industry," recalls the engineer, who spent many hours here, somewhat wistfully. However, he has very little time to reminisce about days gone by, as a further rebuild is already imminent. The galvanic capabilities of the IST are being made fit for the future. "Under the buzzword Galvanic 4.0, we will, in the future, work together with our partners and customers to develop solutions for the integration of electrochemical procedures into process chains," reveals Rowena Duckstein, who took over the team management on 1<sup>st</sup> August.



**Ready for a fresh start: Torsten Hochsattel and Rowena Duckstein pack up the last waveguide coated at the Fraunhofer IST for the Sentinel-1 mission. ©Fraunhofer IST, Falko Oldenburg**

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