

## Press Release

### Kymeta Develops Novel Metamaterial Antennas with CST STUDIO SUITE

**Darmstadt, Germany, June 17, 2014 – Using the electromagnetic (EM) simulation tool, CST STUDIO SUITE®, Kymeta Corporation designs a novel range of lightweight portable antennas for mobile satellite communications.**

Kymeta Corporation (<http://www.kymetacorp.com>) was formed to commercialize a new, innovative metamaterials-based antenna technology for satellite communication known as Metamaterials Surface Antenna Technology (MSA-T).

By replacing the traditional beam-steering mechanisms such as gimbals and phased arrays with MSA-T, Kymeta aim to produce antennas that are lightweight and responsive to use on the move and in the field. To design a working metamaterials-based antenna with low power requirements and a small form factor, Kymeta needed to optimize a multitude of interdependent variables.

*“CST MICROWAVE STUDIO provided a necessary component of our RF design flow at Kymeta. Without it, the challenge of designing numerous interrelated antenna features would have been nearly insurmountable,”* said Adam Billy, Lead RF Design Engineer, Kymeta Corporation.

By integrating virtual prototyping into the design process, Kymeta was able to gain insight into the functioning of the antenna, minimize the number of real prototypes required and reduce costs. The full success story explaining how Kymeta used electromagnetic simulation can be downloaded at <https://www.cst.com/kymeta>

#### **About CST**

Founded in 1992, CST offers the market’s widest range of 3D electromagnetic field simulation tools through a global network of sales and support staff and representatives. CST develops CST STUDIO SUITE, a package of high-performance software for the simulation of electromagnetic fields in all frequency bands, and also sells and supports complementary third-party products. Its success is based on combination of leading edge technology, a user-friendly interface and knowledgeable

support staff. CST's customers are market leaders in industries as diverse as telecommunications, defense, automotive, electronics and healthcare. Today, the company enjoys a leading position in the high-frequency 3D EM simulation market and employs 240 sales, development, and support personnel around the world.

CST STUDIO SUITE is the culmination of many years of research and development into the most accurate and efficient computational solutions for electromagnetic designs. From static to optical, and from the nanoscale to the electrically large, CST STUDIO SUITE includes tools for the design, simulation and optimization of a wide range of devices. Analysis is not limited to pure EM, but can also include thermal and mechanical effects and circuit simulation. CST STUDIO SUITE can offer considerable product to market advantages such as shorter development cycles, virtual prototyping before physical trials, and optimization instead of experimentation.

Further information about CST is available on the web at <https://www.cst.com>.

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