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T. Shaska* (shaska@oakland.edu) and **L. Beshaj** (lubjana.beshaj@usma.edu). *Kummer and Shioda-Inose surfaces of reducible Jacobian surfaces.*

We will describe the Kummer and Shioda-Inose surfaces of a genus 2 Jacobian and applications to cryptography. Our main focus will be on geometrically reducible Jacobian surfaces. Explicit examples will be presented for $(2, 2)$, $(3, 3)$, and $(5, 5)$ reducible Jacobians. Moreover, we will determine the corresponding Kummer and Shioda-Inose surfaces when the elliptic components of the Jacobian are isogenous to each other. (Received November 25, 2018)