



**FUSION  
FOR  
ENERGY**

**Partnership**

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At Fraunhofer IKTS, we bring over a decade of expertise in the development of pure Tungsten Carbide and innovative Tungsten Carbide compositions. Our advanced manufacturing techniques allow us to produce a variety of geometries through conventional as well as sinter based additive manufacturing methods. We are also pioneering research in High-Entropy Carbides and Carbo-nitrides. Both classes of materials promise significant advantages for shielding applications by mitigating issues like W embrittlement and flaking (as known for metallic tungsten), while also providing low activation energy. In addition, IKTS offers cutting-edge characterization services, including high-temperature assessments of mechanical, thermal, electrical, and phase properties (HT-XRD).

**\* What form of collaboration would you like to promote?**

- Offer - my organisation has relevant expertise, technologies, or raw materials to offer
- Request - we are looking for specific expertise, technologies, or raw materials
- Both of the above

**\* Please indicate below the collaboration preferences you wish to highlight (you can select more than one)**

- Specific expertise and technologies
- Specific materials
- To sub-contract to partners
- To co-contract with partners
- Sharing general technologies and business presentations
- Other

**Expiry Date of the Offer or Request (you must indicate any business opportunity related expiry date, by default postings will expire after six months but can be renewed on request)**

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**\* Your contact email**

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