

**j-fiber is one of the worldwide leading suppliers of high-performance optical fibers and preform designs addressing advanced tele-communications and specialty industry markets.**

**With our new fused silica materials offering we also support advanced optics, laser and lithography applications.**

**We invest in long-term customer partnerships, innovative product technologies, and continuous enhancement of our manufacturing processes to make our clients gain maximum benefits from sourcing j-fiber products.**

*To learn more about how j-fiber can best serve you, please visit us at:*

**Photonics West 2012**  
**January 24 thru 26**  
Moscone Center  
San Francisco, CA, USA  
**Booth # 2615**

**or at [www.j-fiber.com](http://www.j-fiber.com)**

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**j-fiber GmbH**  
Im Semmicht 1  
D-07751 Jena, Germany  
Tel.: +49-3641-352 100  
Fax: +49-3641-352 101  
Email: [info@j-fiber.com](mailto:info@j-fiber.com)

## **j-fiber News at Photonics West 2012**

Photonics West 2012 show highlights:

### **High-purity silica materials and products for advanced optical fiber and photonics technologies**

**SQ Fused Silica for optics, laser, lithography and fiber optics** j-fiber's material of choice for best performance in advanced optics and photonics technologies. We address semi-finished parts manufacturers and end-users with silica material of highest purity and with best optical and physical properties.

*Learn more about how your optics, laser, lithography or preform and fiber manufacturing can benefit from sourcing j-fiber SQ materials*

**Uniformly Fluorine doped and customized tubes** j-FST tubes with highest fluorine concentrations for preform and specialty fiber making – our new j-fiber materials offering. j-FST tubes are also available in individually specified tube designs with double or multi-step refraction index profiles.

*Learn more about how our j-FST tubes address your preform or specialty fiber making requirements*

**Silica rods** Our high-performance glass materials offering: undoped silica rods with high or low OH content for high transmission from VIS to IR range as well as doped rods for OEM and preform manufacturing with optional Boron, Germanium or Fluorine doping.

*Learn more about our silica materials portfolio and how it best serves your purposes in optical fiber making*

**Step index preforms** Individually specified preform designs with single, double or multi layer refraction index profiles. For high power laser transmission, medical application, spectroscopy or research and development in UV, IR or NIR wavelengths ranges.

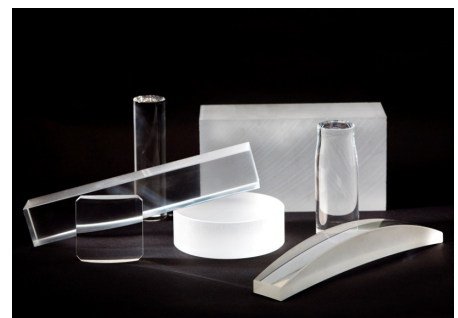
*Learn more about our SI preforms and tell us about your specific requirements*

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### **Our Photonics West 2012 highlights in detail**

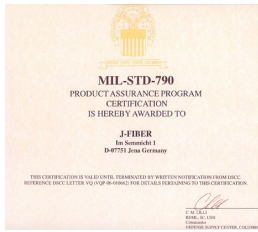
#### **SQ fused silica for optics, laser, lithography and fiber optics**

With SQ, j-fiber offers its own fused silica featuring the quality and properties that high-performance optics and photonics technologies depend upon. It is completely free of bubbles and inclusions, striations and striae. This material shows high refractive index homogeneity and low fluorescence under excimer laser radiation as well as maximum stability under thermal conditions and stress. SQ therefore is the first choice material for challenging optical applications such as excimer laser optics and beam deliveries, DUV optics components, standard optics (VIS and NIR), UV-rods, preforms and optical fibers, technical applications (silica vessels, windows or micro-/lithographic applications such as stepper lenses, photo mask blanks, wafer, and litho optics).



*Customized quality and parts configuration:* SQ is recommended for semi-finished parts in round or rectangular shapes up to 6 inches in size (standard) and is also available in larger diameters and block forms. Customers can choose from different grades and excimer sub-grade quality levels in accordance with their individual application or specification.

**Certified top quality,  
"green" fiber products**



MIL-STD-790 Certificate  
US Department of Defence



DIN ISO 9001 and 14001  
Successful re-certification  
2011



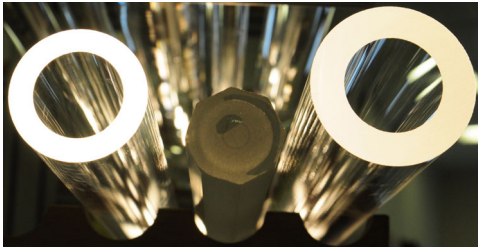
EMAS Certificate for  
"green" fiber products and  
processes



TÜV technical certificate for  
safe and reliable products

**Uniformly fluorine doped and customized tubes**

j-FST tubes are the most recent contribution to our j-fiber materials offering to enable advanced preform and specialty fiber products. j-FST tubes show highest fluorine



concentrations and have been developed for manufacturing of special fiber designs as substrate or jacketing tube. They are the ideal material for overcladding processes in preform manufacturing, serve as substrate materials in CVD processes or as fluorine doped capillaries used for specialty fiber designs. They are also available in customized tube designs

with individual specification in double or multi step refraction index profiles to meet individual customer requirements.

**Silica rods**

Our **portfolio of silica rods** comprises undoped high OH and low OH rods as well as homogenously doped rods with various dopants.

With **Undoped rods SQ and j-Plasil** j-fiber offers ultra-pure fused silica material to hard clad fiber manufacturers. SQ inclusion free fused silica provides for high laser stability. Its high OH and H<sub>2</sub> content makes it ideally suited for application in the UV / VIS area. With **j-Plasil** low OH rods j-fiber offers high-performance glass materials for high transmission from VIS to IR range, and specifically optimized for the near IR range.



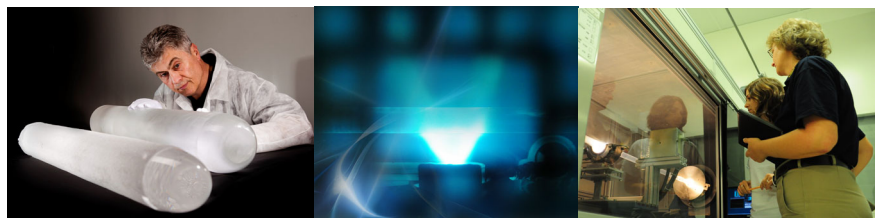
Our **doped silica rods** provide OEM fiber and preform manufacturers with materials offering high concentrations of optional Boron (e.g for PM fiber manufacturing), Fluorine or Germanium with highly homogenous index profiles.

**Step index preforms**

The j-fiber portfolio of step index preforms comprises various configuration options, such as for core/clad ratios; high or low aperture, with single, double or multi-layer refraction index profiles or wavelength optimization. j-fiber step index preforms show superior performance during draw and allow for excellent diameter control, making it the material of choice for fibers used in high-power laser, medical, spectroscopy or R+D applications.

Our portfolio includes Fluorine doped and Germanium doped step index preforms: FSI-UV preforms are thereby ideal for transmission in the UV range while our FSI-IR preforms are best suited for transmission in visible and near IR range applications.

Germanium doped step-index preforms with a Germanium doped core are available with customized CCDR and Numerical Apertures of up to 0.35.



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