

## j-fiber News at OPTATEC 2012

OPTATEC 2012 show highlights:

### New fibers and materials for use in advanced fiber optics and photonics technologies

**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:**

**OPTATEC 2012**  
**May 22 thru 25**  
Neue Messe  
Frankfurt/Main,  
Germany  
**Booth # A54, Hall 3.0**

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

**Silica Image Guide Rods** the recent innovative j-fiber material for high-resolution image transfer with a high number of picture elements and tight pixel packaging density.  
*Learn more about our latest silica materials innovation.*

**SQ Fused Silica for optics, laser, lithography and fiber optics** with excellent optical physical properties is j-fiber's material of choice for applications in the UV range.  
*Learn more how j-fiber can be your reliable material source for high-purity fused silica.*

**j-Ultrasol solarization resistant Multimode fiber** featuring the best combination of high relative transmission and transmission stability under UV exposure. Now available with more diameter size and coating options.  
*Learn more how j-Ultrasol can best support your device or application.*

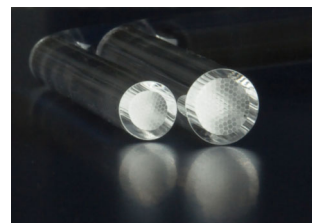
**j-NCS fibers with customized non-circular cross sections** of core and/or cladding features an undoped fused silica core in round, square, rectangular, hexagonal or octagonal core shape designs and a fluorine doped silica cladding.  
*Learn more how j-NCS fibers serve your specific requirements in laser technology, high power transmission, imaging, spectroscopy, and medical applications.*

**Uniformly Fluorine doped and customized tubes** j-FST tubes with highest fluorine concentrations for preform and specialty fiber making.  
*Learn more how j-FST tubes address your preform or specialty fiber making requirements.*

### Our OPTATEC 2012 highlights in detail

#### Silica Image Guide Rods

For high-resolution image transfer in medical and dental diagnostics, sensor applications, collimating and focusing optics, spectroscopy and power laser delivery. Silica Image Guide Rods allow for operation in the high temperature range up to 1,000°C. The combination of high number of picture elements (up to 10,000 pixels) and tight packaging density of the pixels provides for highest transmission respectively in high resolution image transfer.

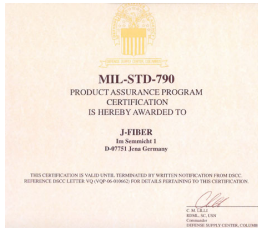


#### SQ fused silica for optics, laser, lithography and fiber optics

SQ fused silica with excellent optical physical properties for applications in the UV range. We supply SQ as component or ingot in demanded quantities and qualities (grades: SQ0, SQ1, QT, excimer subgrades) and customized specifications which complete the application range of optics from NIR to DUV with very good transmission beyond 185nm. SQ fused silica features high laser durability and refractive index homogeneity, high temperature and temperature change stability, low stress birefringence and very low thermal expansion coefficient and fluorescence due to the high OH and H2 content.



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



**MIL-STD 790 Certificate US  
Department of Defence**



**DIN ISO 9001 and 14001**



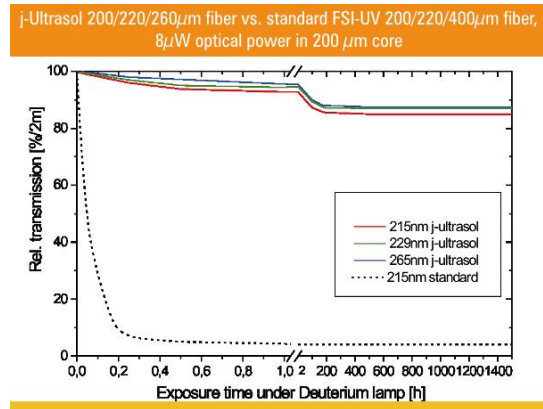
**EMAS Certificate for  
"green" fiber products and  
processes**



**TÜV technical certificate for  
safe and reliable products**

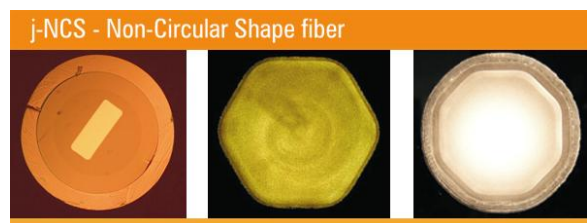
**j-Ultrasol solarization resistant Multimode fiber**

featuring the best combination of high relative transmission and transmission stability providing for maximum fiber life under UV exposure. It best supports challenging spectroscopy, medical or industry applications in the 200...800nm wavelengths range and is specifically suited for use in the critical sub 230nm range. j-Ultrasol shows excellent transmission stability results of 96% in short term and steady 86% under long term exposure at 215nm. j-Ultrasol is a fluorine-doped step index Multimode fiber which is available in 100/110, 200/220, 300/330 and 400/440  $\mu\text{m}$  diameter sizes with different coatings.



**j-NCS fibers with customized non-circular cross sections**

of core and/or cladding for the specific requirements in laser technology, high power transmission, imaging, spectroscopy, and medical applications. The series of Fluorine-doped step index Multimode fibers features an undoped fused silica core in round, square, rectangular, hexagonal or octagonal core shape designs and a fluorine doped silica cladding. j-NCS designs allow the specification of the OH content of the core glass and consider client requirements in cladding thickness and NA.



**Uniformly fluorine doped and customized tubes**

j-FST tubes enable advanced preform and specialty fiber products featuring highest fluorine concentrations. Developed for the manufacturing of special fiber designs as substrate or jacketing tube. j-FST tubes are the ideal material for overcladding processes in preform manufacturing, serve as substrate materials in MCVD processes or as fluorine doped capillaries used for specialty fiber designs. We also customize tube designs according to individual specification in double or multi step refraction index profiles.

