



## WEBINARS

Join us for a **FREE Webinar**

# Photonic Crystal Fibers: Three Decades of Novel Science

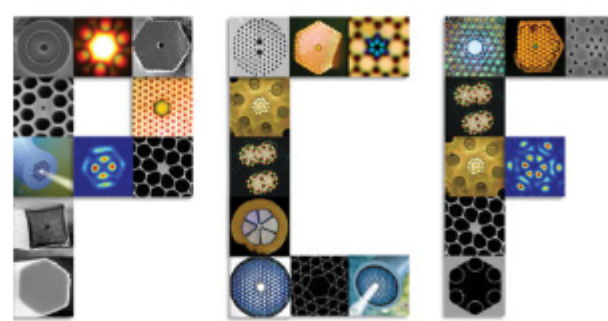
**Thursday, June 1, 2023 10:00 AM - 11:00 AM EDT**

[Register Now](#)

## .: About This Webinar

Since they first appeared in the 1990s, photonic crystal fibers (PCFs), thin strands of glass with an intricate array of hollow channels running along their length, have ushered in a new era of linear and nonlinear fiber optics. As well as permitting unprecedented control over dispersion and birefringence, they offer guidance in both solid glass and hollow cores.

Curiosity-driven research into light-matter interactions in PCF has inspired many potential applications, as seen in the following four examples. First, through pressure-adjustable dispersion, gas-filled hollow-core PCF provides an elegant means of compressing pulses to single-cycle durations, as well as underpinning a range of unique sources of tunable deep and vacuum UV light. Second, chiral PCF is circularly and topologically birefringent, supporting optical vortices and in some cases strong circular dichroism. Third, microparticles optically levitated inside hollow-core PCFs can be used to sense physical quantities with high spatial resolution. Finally, strong optomechanical effects in solid-core PCFs permit stable timing-modulated high harmonic mode-locking at few-GHz repetition rates. After a brief introduction, Philip Russell shares several recent developments in the field of PCFs.



### Who should attend:

R&D scientists, engineers, designers, and manufacturers who are interested in gaining a deeper understanding of photonic crystal fibers and their applications. Those who work with PCFs or fiber optics in applications such as communications, lasers, linear and nonlinear devices, gas sensors, and more.

### About the presenter:

Philip Russell is an emeritus founding director at the Max-Planck Institute for the Science of Light (MPL) in Erlangen, Germany. He obtained his Doctor of Philosophy degree in 1979 at the University of Oxford and since then has worked at universities and research laboratories in France, Germany, the U.S., and the United Kingdom. His interests focus on curiosity-driven research into light-matter interactions in photonic crystal fibers, often leading to novel applications and the formation of spin-out companies. He is a fellow of the Royal Society and Optica (formerly The Optical Society, OSA) and has won a number of awards for his work, including the 2000 OSA Joseph Fraunhofer Award/Robert M. Burley Prize, the 2005 Thomas Young Prize of the Institute of Physics (London), the 2005 Körber Prize for European Science, the 2013 EPS Prize for Research into the Science of Light, the 2014 Berthold Leibinger Zukunftspreis, the 2015 IEEE Photonics Award, and the 2018 Rank Prize for Optoelectronics. He was OSA's President in 2015, the International Year of Light.

## .: Mark Your Calendar

**Date: Thursday, June 1, 2023**

**Time: 10:00 AM - 11:00 AM EDT**

Space is limited. Reserve your Webinar seat now at: <https://attendee.gotowebinar.com/register/1353914859934498393?source=eblast>

After registering you will receive a confirmation email containing information about joining the Webinar.

## SYSTEM REQUIREMENTS

### Operating System

Windows® 7 or later, Mac OS® X 10.9 or later, Linux®, Google Chrome™ OS  
Android™ OS 5 or later, iOS® 10 or later

### Web Browser

Google Chrome™ (most recent 2 versions)  
Mozilla Firefox® (most recent 2 versions)

### Mobile Devices

Android™ 5 or later  
iPhone® 4S or later  
iPad® 2 or later  
Windows Phone® 8+, Windows® 8RT+

## .: More from Photonics Media

### Upcoming Webinars

- [Fused Silica Tubes for Optical Fiber Manufacturing: Fiber Performance Sensitivity on Purity and Tube Geometry](#), 6/14/2023 1:00:00 PM EDT

### Archived Webinars

- [InGaAs Photodiode Detectors: Packaging, Performance, and SWIR Applications](#)  
- [External Light Sources for Co-Packaged Optics: Applications and Beyond](#)  
- [Addressing the Measurement Challenges of XR Device Optics: Displays, Lenses, and Waveguides](#)

### Don't miss out!

Sign up for our [Webinar Alerts](#) email today and never miss an upcoming event.

We respect your time and privacy. You are receiving this email because you are a Photonics Spectra magazine subscriber. You may use the links below to manage your subscriptions or contact us.

Questions: [info@photonics.com](mailto:info@photonics.com)

[Unsubscribe](#) | [Subscribe](#) | [Subscriptions](#) | [Privacy Policy](#) | [Terms and Conditions of Use](#)

Photonics Media, 100 West St., PO Box 4949, Pittsfield, MA 01202-4949  
© 1996 - 2023 Laurin Publishing. All rights reserved. Photonics.com is Registered in the U.S. Patent & Trademark Office.  
Reproduction in whole or in part without permission is prohibited.