# Fiber Optic Communication 1966



## Overview

Rare film of Charles Kuen Kao, pioneer of optical fibre communications, experimenting with a prototype single mode fibre at Standard Telecommunication Laboratories in 1966. The. Fifty years ago this month, a 32-year-old Chinese-born research engineer named Charles Kao published a milestone paper that set off the entire field of fiber-optic communications and eventually earned him a share of the 2009 Nobel Prize in Physics. Dubbed the “godfather of broadband” and “father of fibre optics,” Kao's ideas laid the foundations for the development of the vast optical fibre. Created by the Fiber Optic Association as an educational project to help document the history of the development of fiber optics for communications. Dates, of course, are often approximate, as putting a firm date on the introduction of a new technology is often impossible! the most important. In 1966 Charles K. Kao and George Hockham proposed optical fibers at STC Laboratories (STL) at Harlow, England, when they showed that the losses of 1000 dB/km in existing glass (compared to 5-10 dB/km in coaxial cable) was due to contaminants, which could potentially be removed.

*© 2026 EXF OPTICAL NETWORKS - All rights reserved*

## Article Content

The history of optical fibre communications

Rare film of Charles Kuen Kao, pioneer of optical fibre communications, experimenting with a prototype single mode fibre at Standard

How Charles Kao Beat Bell Labs to the Fiber-Optic

Fifty years ago this month, a 32-year-old Chinese-born research engineer named Charles Kao published a milestone paper that set off the entire

Signalling the internet evolution: Charles Kuen Kao, the

In 1966, in a lab in Essex, electrical engineer Professor Sir Charles Kuen Kao (1933–2018) made a discovery that would transform modern communication.

The History of fiber-optic communication

In 1966 Charles K. Kao and George Hockham proposed optical fibers at STC Laboratories (STL) at Harlow, England, when they showed that the losses of 1000 dB/km in existing glass (compared to 5

History of Fiber Optics

These agreements accelerated the commercialization of fiber optic technology. In 1976, American Telephone and Telegraph Company (AT&T)

UNIT I INTRODUCTION TO OPTICAL FIBERS

The optical source launches the optical signal into the fiber. The optical signal will become progressively weakened and distorted because of scattering, absorption, and dispersion mechanisms in the fiber

"Father of Fiber Optic Communications" Charles Kuen

The most important paper in Kao''s fibre optics research was "Dielectric-Fibre Surface Waveguides for Optical Frequencies" published in July

A tribute to Charles Kao, the father of fiber-optic

The world watched the 1980 Winter Olympics in Lake Placid, NY through an experimental fiber link installed by Bell Labs. Through the 1980s, fiber links

Fiber Optic History | Jeff Hecht

History of fiber optics By Jeff Hecht This short history of fiber optics was originally published in Fiber Optics Technician''s Handbook, by Jim Hayes, Delmar Publishers, Albany, New York. City of Light:

*© 2026 EXF OPTICAL NETWORKS - All rights reserved*

“The Only Thing Left Is Optical Fibers” (1960–1966)

Abstract. Lacking the immense resources of AT&T, Standard Telecommunication Laboratories looked at many ideas, investigated some, and seriously pursu

Charles Kao: The Father of Fiber Optic Communications

In 1966, while working at Standard Telecommunication Laboratories (STL) in the United Kingdom, Charles Kao turned his attention to the emerging

Historical Development of Optical Communication Systems

Optical fibers can provide a much more reliable and versatile optical channel than the atmosphere, Kao and Hockham pub-lished a paper about the optical fiber communication system in 1966.

How Charles Kao Beat Bell Labs to the Fiber-Optic

That was one of several key points that Kao and his assistant George Hockham made in their 1966 paper outlining how a fiber-optic communication

The Fascinating History of Fiber Optics and Its Impact on ...

High-speed fiber optic networks enable rapid data transmission, supporting everything from streaming services to cloud computing. The capacity of fiber optics to handle massive amounts of data has

Your Engineering Heritage: Fiber Optics

The cost of transmitting a phone call to any place on Earth within reach of a fiber-optic cable rapidly approached zero, thus knitting the planet more closely into a single instant

The Origin of Optical Fiber Products: How Light

In today''s hyper-connected world, high-speed internet, crystal-clear video calls, and real-time data transfer are possible thanks to one

The historical paper that started the optical fibre

2016: Half a Century of Optical Fibre Communications 2016 was the 50th anniversary of the publication that started it all. Optical Fibre has transformed our

The History and Importance of Fiber Optic Technology

The history of fiber optic technology is a testament to human ingenuity and the relentless pursuit of better communication methods. From its

Related Video Reference

*© 2026 EXF OPTICAL NETWORKS - All rights reserved*

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

## Contact Us

Continue your research online:

Website: https://explosivefunctions.co.za
Technical inquiry: https://explosivefunctions.co.za/contact.html
EU project coordination: Parque das Nações, Lisbon, Portugal

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 EXF OPTICAL NETWORKS - All rights reserved