

**Title:** Modelling and Optimization of Optical Communication Networks

**Subtitle:** NA

**Edited by:** Mr.Chandra Singh, Dr.Rathishchandra R Gatti, Dr.K.V.S.S.S.S Sairam, and Dr.Ashish Singh

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**Scope of work:**

The focus of this book is on the key technologies associated with modelling & Optimization of Optical Communication Networks. This book provides a basis for discussing open principles, methods and research problems in Modelling of Optical Communication Networks. This also provides a systematic overview of the state-of-the-art research efforts and potential research directions to deal with Optical Communication Networks. It also simultaneously focuses on extending the limits of currently used systems encompassing optical and wireless domains and explores novel research on wireless and optical techniques and systems, describing practical implementation activities, results and issues. The Book describes several numerical models and algorithms for simulation and optimization of optical communication networks. Modelling & Optimization presents several opportunities for automating operations and introducing intelligent decision making in network planning and in dynamic control and management of network resources.

**Tentative table of contents or list of topics:**

1.Optical Technologies 2.Optical Materials 3.Optical Signal Processing 4.Photonic Communications Systems and Networks 5.High-speed Optical Communications systems & devices 6.All-Optical Communication Systems 7.Microwave Photonics 8.Optical MIMO 9.Optical Fibers and Devices for Optical Communications 10.Optical Amplifiers 11.Modeling & Optimization of Optical Communication Networks 12.Optical Sensors 13.Optical Network Management 14.Optical Switching and Routing (WAOR) 15.Optical packet networks, memories and data storage 16.Optical Transparency and network scalability 17.Network reliability and Availability (RONEXT) 18.Wireless and Optical Networking 19.Radio-over-fibre transmission 20.Broadband Metro and Access Networks

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**Full Chapter Submission:** June 30,2021

**Chapter Acceptance:** Sep 30,2021

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**Submission to Publisher:** Dec 15,2021

The book will be published under the Wiley-Scrivener imprint and will be indexed by *Scopus* and offered to *Web of Science*.

**How to Submit Your Chapter:**

Send your 500-word abstract by the designated deadline to: <https://easychair.org/conferences/?conf=moocn2021>

Advise us how many words your chapter is likely to be and the number of figures/tables. Note we are looking for a range of 8,000-12,000 words. Make sure list all co-authors with complete contact information and links to Google Scholar Profile and CVs. The publisher's guidelines can be located at <https://www.scrivenerpublishing.com/guidelines.php>. Note that all chapters will be put through similarity software and publisher's guidelines are an overall similarity index of less than 15% (with maximum 3% from any single source). All Chapters Should have 20-25 pages

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**About Editor(s):**

Mr.Chandra Singh Sahyadri College of Engineering & Management,Mangalore,India;chandrasingh146@gmail.com  
Dr.Rathishchandra R Gatti Sahyadri College of Engineering & Management,Mangalore;gattirathish@gmail.com  
Dr.K.V.S.S.S.S.Sairam NMAM Institute of Technology,Nitte,Udupi,drsairam@nitte.edu.in  
Dr.Ashish Singh NMAM Institute of Technology,Nitte,Udupi,ashishsingh@nitte.edu