# e-book

## Steinbeis-Edition







Steinbeis-Europa-Zentrum, Steinbeis 2i GmbH, Photonics-Cluster-Austria (Ed.)

Towards Best Practice in Photonics Outreach for the General Public







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#### **Imprint**

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### **Foreword**

Optics and *photonics* are widely regarded today as key technologies. Many science and technology experts have described the 21st century as the century of the photon because optics and photonics technologies are providing science and industry with a wide-range of essential applications impacting nearly all areas of our lives! In fact, Photonics has been recognized as a *Key Enabling Technology* (KET) by the European Commission in a Communication<sup>1</sup> dating back to 2009. However, despite its importance photonics is still not a well-known technology to a majority of people.

This handbook is devoted to all those public and private organizations willing to organize outreach activities for the general public. In particular, we address universities, research centres, science centres, museums, that have outreach at the core of their activity, and also city councils, regional administrations and national governments interested in the promotion of scientific knowledge to the general public.

The objective of this handbook is to summarize best practice on how to promote photonics and light-based technologies to the general public. We hope that our experiences in the Photonics4All project will serve all those interested as a useful inspiration and guide when promoting photonics. The handbook is not meant to be authoritative, nor exhaustive in terms of photonics outreach, which is why we decided to publish this document with the title 'Towards Best Practice in Photonics Outreach', but we hope it provides an overview of the best working approaches undertaken in the Photonics4All project and benefits the network of science communicators throughout Europe. The handbook should be relevant to all those interested in outreach, whether a newcomer or more experienced science communicators, please pick and choose the elements that are relevant for your own outreach activity. The text in this handbook is accompanied by practical and user-friendly information in the annex; pages of which can be printed out individually. Policy makers too can also find relevant information in the conclusions at the end of the booklet.

<sup>1</sup> http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0512&from=EN

Please note that two other handbooks are available in this series; one on photonics outreach activities targeted at young people and students in Photonics, and a second on best practices in Photonics outreach with Entrepreneurs.

A number of partners have contributed to this publication throughout the project; from the initial proposal of good practices, to the selection of topics and to the final product. We would like to thank the European Commission and Photonics21 for the promotion of the project "Photonics4All" under the EU program "Horizon 2020" for research and innovation, along with our partners who have supported our work during the lifetime of the project. We would like particularly to thank our sister projects "GoPhoton!" and "Light2015" for sharing their best practice in how to increase awareness of photonics.

Photonics4All Consortium, December 2016

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### 1 Introduction

The following activities and outreach tools created during the Photonics4All project are described in this handbook: Photonics Campaigns, photonics outreach bookmarks, the Omnilight Laboratory (innovative new Photonics lecturing demonstration equipment), Photonics radio and television presentations, Photonics Science Slams. In each section which describes the activity or tool we include the following; a description of each activity, an outline of the intended target groups, how the event was organised / the tool developed, along with methods to assess the impact of each type of activity, and our experiences and recommendations of delivering the activity or working with the tool. At the end of the handbook are Annexes which detail event planning tools, contact details for each partner (Annex 4) – all of whom can be contacted for further information), along with a short description of the Photonics4All project (Annex 3).