

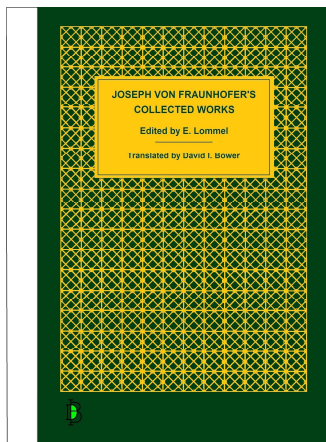
JOSEPH VON FRAUNHOFER'S COLLECTED WORKS

Edited by E. Lommel

Translated by David I. Bower

Published: April 2017 by David I. Bower

ISBN 978-0-9934062-2-5 Price £30 in UK



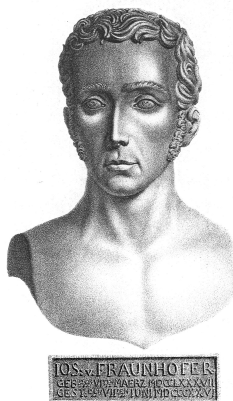
The text of Lommel's edition is now readily available in reproduction but this is the first time Fraunhofer's complete work has been available in English, with all fourteen illustrations to the papers well reproduced.

Fraunhofer needs no introduction to physicists, or indeed to many other scientists. He is especially well known for his invention of the diffraction grating and his study of the absorption lines in the solar spectrum now called Fraunhofer lines.

His output was not enormous – much of his research was a spare time occupation and he died at the age of thirty-nine – but its quality bears witness to his extraordinary abilities.

The book contains a preface by Lommel, thirteen papers and parts of two letters all produced by Fraunhofer in the years 1814 -1825. One major paper is concerned with the determination of the properties of optical glasses and two with the study of diffraction, in one of which the first accurate determinations of light wavelengths are made. A fourth major paper is concerned with the theory of halos and sun-dogs and with related experiments.

Shorter papers include descriptions of his invention of new micrometers for use with telescopes and of the emission lines in the spectrum of the electric spark. Two short papers are concerned with the design of a large refractor for the Dorpat observatory.



The book is a perfect-bound A4 pb of xvi + 156 pages with a frontispiece and 14 illustrations in the text. It is obtainable from the publisher at 2 Welburn Avenue, Leeds LS16 5HJ for £30 or £33 including post and packing in the UK, payable by cheque to *D.I.Bower* or through PayPal (request invoice). For purchasers overseas, post and packing will be charged at cost. Enquiries to david@dibower.co.uk.