



Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures

Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins

[Download now](#)

[Click here](#) if your download doesn't start automatically

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures

Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins

The present book was written for three classes of readers—"college students, technically trained men who deal with processes requiring high temperature measurements, and less trained observers who may make the measurements." The book is practically a synopsis of "Measurement of high temperatures" by Burgess and Le Chatelier, Wiley, 1912, but is presented in different form especially suitable for the class room, as minor details are omitted, and in several places the text is illustrated by practical problems. Also at the end of each chapter are several experiments, fourteen in all, which are prepared in sufficient detail for the ordinary student, and which cover the field of pyrometry very satisfactorily. The chapters are headed as follows: (1) Standard Temperature Scales; (2) Resistance Pyrometry; (3) Thermoelectric Pyrometry; (4) Radiation Pyrometry; (5) Optical Pyrometry. The text is well illustrated and several new American instruments are shown. A few comments may be made on points of minor detail. In the preface it is stated that "the day is already past when foundrymen and steel workers depend upon the eye to judge the temperatures of their product in the various stages of its heat treatment, when makers of ceramic products depend upon the indication of fusible cones," etc. One needs but visit industrial plants to realize this Utopian condition is far from being fulfilled. Probably nine out of ten ceramic industries employ fusible cones or similar means of temperature measurement, and many of the leading ceramic engineers of this country advocate their use in preference to more scientific instruments. A point in history is brought out on page 3. Bolton ("Evolution of the thermometer") states that Celsius assigned the number 100 to the temperature of melting ice and 0 to the temperature of steam. The present assignment of numerals was made by Christ in 1743. Also, according to Bolton, Fahrenheit did not assign the number 212 to the boiling point of water as here stated. The method of correcting for lead resistance of the resistance thermometer, page 21, is crude. Even for the most elementary students, the bridge should be arranged as in Fig. 7. A student will be interested in solving the mathematics of the Wheatstone bridge in order to see why the arrangement in Fig. 7 compensates properly. Sulphur should not be boiled in an aluminum tube as illustrated in Fig. 15. With such a tube electrically heated to the top as shown in the figure, the vapor can be superheated to almost any value. The heating coil should be much shorter, and for accurate work glass tubes are to be preferred. The geometrical optics of Fig. 44 is incorrect. Prism M, Fig. 62, should be turned through 180°. Recent work indicates that C_2 is more nearly equal to 14,350 than 14,500 as given on page 91. On page 140 it is stated that "a person of no training can get better results with a radiation pyrometer than with an optical pyrometer." This is contrary to experience. Published investigation has shown that persons who are totally unfamiliar with the optical pyrometer can set to within 50 or 10° C. To obtain such accuracy with a radiation pyrometer requires a great amount of experience and a consideration of many factors which are not mentioned in any text-book.... The demand for engineers having some knowledge of practical pyrometry is becoming greater every year. Many schools are offering courses in this subject and the day is near when pyrometry will be a required course for engineers and chemists. The present book should serve as a suitable text for a junior or senior course covering one semester.

—*Physical Review* [1918]



[Download Practical Pyrometry: The Theory, Calibration and Use of ...pdf](#)

 [Read Online Practical Pyrometry: The Theory, Calibration and Use ...pdf](#)

Download and Read Free Online Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins

Download and Read Free Online Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins

From reader reviews:

Emily Walker:

Why don't make it to become your habit? Right now, try to ready your time to do the important work, like looking for your favorite reserve and reading a publication. Beside you can solve your condition; you can add your knowledge by the e-book entitled Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures. Try to the actual book Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures as your friend. It means that it can for being your friend when you sense alone and beside regarding course make you smarter than before. Yeah, it is very fortunated for you personally. The book makes you far more confidence because you can know every little thing by the book. So , let me make new experience and knowledge with this book.

Lee Flynn:

Information is provisions for people to get better life, information these days can get by anyone with everywhere. The information can be a expertise or any news even a huge concern. What people must be consider if those information which is inside the former life are difficult to be find than now's taking seriously which one works to believe or which one the actual resource are convinced. If you obtain the unstable resource then you obtain it as your main information you will see huge disadvantage for you. All those possibilities will not happen within you if you take Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures as your daily resource information.

Christopher Patterson:

Playing with family in the park, coming to see the marine world or hanging out with pals is thing that usually you have done when you have spare time, after that why you don't try thing that really opposite from that. One particular activity that make you not sensation tired but still relaxing, trilling like on roller coaster you are ride on and with addition info. Even you love Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures, you may enjoy both. It is fine combination right, you still need to miss it? What kind of hang-out type is it? Oh occur its mind hangout men. What? Still don't get it, oh come on its called reading friends.

Peggy Dunn:

That publication can make you to feel relax. This book Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures was multi-colored and of course has pictures on there. As we know that book Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures has many kinds or category. Start from kids until teens. For example Naruto or Detective Conan you can read and feel that you are the character on there. Therefore not at all of book are generally make you bored, any it offers up you feel happy, fun and unwind. Try to choose the best

book for you and try to like reading this.

**Download and Read Online Practical Pyrometry: The Theory,
Calibration and Use of Instruments for the Measurement of High
Temperatures Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins
#B12XKNI347D**

Read Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins for online ebook

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins books to read online.

Online Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins ebook PDF download

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins Doc

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins Mobipocket

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins EPub

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins Ebook online

Practical Pyrometry: The Theory, Calibration and Use of Instruments for the Measurement of High Temperatures by Ervin S. Ferry, Glenn A. Shook, Jacob R. Collins Ebook PDF