

## Materials Thermochemistry— 6th Edition

O. Kubaschewski, C.B. Alcock, and  
P.J. Spencer  
(Pergamon Press, 1993, 363 pages).  
ISBN: 0-08-0418899 (hardback),  
0-08-0418880 (paperback)

The issuance of the sixth edition of this classic reference is welcome news for the materials science community. It is indispensable both to current students and to those of us whose formal training in thermodynamics and thermochemistry occurred years ago. The change in title from *Metallurgical Thermochemistry* to *Materials Thermochemistry* reflects the dedication of the authors to extending the tradition of providing a critical reference to reflect the current status of the materials field.

The sixth edition has been extensively revised and updated. Approximately one-

third of the references have been published since the appearance of the 5th edition in 1979. In addition to updated tables of thermochemical data and discussions of new experimental techniques, this edition has added illustrations of their applications to issues of current interest such as environmental pollution in materials processing, production of oxide superconductors, and chemical vapor deposition of ceramics. The examples provide a quick refresher for those of us who do not often use thermochemical principals but who have a sporadic, urgent need to apply them to current problems. The book is suitable for use as a text or reference for undergraduate or graduate students and is an essential reference for scientists and engineers in materials research, development, and practice.

The volume is divided into a discussion of the theoretical concepts, experimental techniques for determining ther-

mochemical data, methods of estimating such data, and examples of the thermochemical treatment of materials problems. Critically evaluated data for thermodynamic properties of inorganic compounds and for metallic solutions are contained in two tables.

During the late stages of the preparation of this edition, O. Kubaschewski died in Aachen. His co-authors, C.B. Alcock and P.J. Spencer, have completed the revision in a manner that is a fitting tribute to Dr. Kubaschewski. It is hoped that they will continue this tradition of providing current and accurate data in an easily usable form.

*Reviewer: Carl J. McHargue is a professor of materials science and engineering and director, Center for Materials Processing at the University of Tennessee-Knoxville. His main research theme is surface modification of ceramics using ion beams.* □

## CALENDAR

Upcoming: June 6–8, Science of Finishing; June 6–9, Powder Metallurgy World Congress and Exhibition; June 6–9, 1994 Intl. Workshop on Superconductivity; July 18–22, Conf. on Emerging Optoelectronic Technologies; July 21–22, MRS-J Summer Meeting

To list an event in the Calendar, contact D.M. Varner, Materials Research Society, 9800 McKnight Road, Pittsburgh, PA 15237-6006; (412) 367-3003; fax (412) 367-4373.

MRS, A-MRS, C-MRS, E-MRS, MRS-I, MRS-J, MRS-Korea, MRS-T, Mexican-MRS, or IUMRS at the end of an entry indicates sponsorship or co-sponsorship of an event by the International Union of Materials Research Societies or one of its adhering bodies. "Endorsed" identifies events endorsed by MRS.

▼ identifies a new or revised entry this month.

See the March 1994 MRS BULLETIN for May 1994 Calendar entries.

### JUNE 1994

1–3  
Structures Under Shock and Impact  
Madrid, Spain  
S. Owen, Conf. Secretariat,  
Wessex Institute of  
Technology, Ashurst Lodge,  
Ashurst, Southampton, SO4  
2AA, United Kingdom; 44-  
703-293223; fax 44-703-  
292853.

5–10 ▼  
Ordered Molecular and  
Nanoscale Electronics  
Kona, HI  
Engineering Foundation, 345  
E. 47th St., New York, NY  
10017; (212) 705-7835; fax  
(212) 705-7441.

6–7 ▼  
13th Annual Symposium on  
Electronic Materials,  
Processing, and  
Characterization  
Richardson, TX  
L. Magel, Texas Instruments  
Inc., P.O. Box 655936, M/S  
147, Dallas, TX 75265; (214)  
995-5038; fax (214) 995-  
7785. MRS.

6–8  
Science of Finishing  
Rochester, NY  
E. Murphy, Optical Society of  
America, 2010 Massachusetts  
Ave., NW, Washington, DC  
20036; (202) 416-1980; fax  
(202) 416-6100. Endorsed.

6–9  
Powder Metallurgy World  
Congress and Exhibition  
Paris, France  
Conference Secretariat,  
Société Française de  
Métallurgie et de Matériaux,  
1, rue Paul Cézanne, 75008  
Paris; 33-1-49-53-72-37; fax  
33-1-49-53-71-00. Endorsed.

6–9  
1994 Intl. Workshop on  
Superconductivity  
Kyoto, Japan  
T. Kobayashi, Secretariat,  
ISTEC, 81-3-3431-4002; fax  
81-3-3431-4044. Endorsed

6–10  
8th Conf. on Semi-Insulating  
III-V Materials  
Warsaw, Poland  
J. Katcki, Institute of Electron  
Technology, Al. Lotników  
32/46, 02-668 Warsaw,  
Poland; 48-22-47-02-21;  
fax 48-22-47-06-31; e-mail  
katcki@opto.ite.waw.pl.

6–10  
Intl. Plastics Conf.  
Chicago, IL  
Society of the Plastics  
Industry, 1275 K St., NW,  
#400, Washington, DC 20005.  
(202) 371-5200.

7–10  
15th Intl. Cryogenic  
Engineering Conf. and  
Exhibition  
Genoa, Italy  
C. Rizzuto, Chair ICEC 15, c/o  
Consorzio INFIM, Via  
dell'Acciaio 139, I-16152  
Genoa, Italy; 39-10-6514000;  
fax 39-10-6512981.

8–10 ▼  
15th Intl. SAMPE European  
Conf./Exhibition  
Toulouse, France  
SAMPE, P.O. Box 2459,  
Covina, CA 91722; fax (818)  
332-8929.

8–10  
Ceramics in Biomedical  
Applications  
Alfred, NY  
V. Henkes, New York State  
College of Ceramics,  
Bioceramics Institute, Alfred  
Univ., Alfred, NY 14802; (607)  
871-2284; fax (607) 871-2317  
or -3469.

13–15  
54th Annual Conf. on Physical  
Electronics  
Knoxville, TN  
P. Green, Solid State Div.,  
ORNL, P.O. Box 2008, MS-  
6033, Oak Ridge, TN 37831-  
6033; (615) 576-1864; fax  
(615) 574-4143.

13–16 ▼  
13th Biennial Conf. on Natl.  
Materials Policy  
Williamsburg, VA  
B. Houston, Federation of  
Materials Societies, 1899 L  
St. NW, Ste. 500, Washington,  
DC 20036; (202) 296-9282;  
fax (202) 833-3014.

13–17  
European Vacuum Conf.  
Uppsala, Sweden  
L. Westerberg, Svedberg Lab.,  
Box 533, S-751 21 Uppsala,  
Sweden.

13–17  
Xth Intl. Conf. on Ion  
Implantation Technology  
Catania, Italy  
IIT 94 Organizing Committee,  
c/o Dipartimento di Fisica,  
Corso Italia, 57, I-95129  
Catania, Italy; 39-95-591912;  
fax 39-95-7139154.