

well as a valuable addition to any collection of reference books.

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**Fiber Reinforcement for Composite Materials.** Edited by A. R. Bunsell, Elsevier, New York 1988, ix, 538 pp., bound, US\$ 171. — ISBN 0-444-42801-1


This book is the second volume of a publication series on composite materials edited by R. B. Pipes (Center of Composite Materials, University of Delaware). It deals with various types of synthetic fibers used as reinforcements in advanced composite materials. This volume is subdivided into various chapters giving a clear description of the manufacture, structures and applications of the different fibers, as well as a brief compilation of characterizing methods for single fibers. The chapters are authored by internationally well-known experts and arranged as follows: Chapter 1. A. R. Bunsell: Fiber development for composite materials. Chapter 2. P. K. Gupta: Glass fibers for composite materials. Chapter 3. E. Fitzer, M. Heine: Carbon fiber manufacture and surface treatment. Chapter 4. A. Oberlin, M.

Guigon: The structure of carbon fibers. Chapter 5. G. Calundann, M. Jaffe, R. S. Jones, H. Yoon: High performance organic fibers for composite reinforcement. Chapter 6. H. H. Yang: Aramid fibers. Chapter 7. P. Bouriot: Polyester and polyamide fibers for elastomeric matrix composite materials. Chapter 8. F. E. Wawner, Jr.: Boron and silicon carbide/carbon fibers. Chapter 9. A. R. Bunsell, G. Simon, Y. Abe, M. Akiyama: Ceramic fibers. Chapter 10. R. Hagege, A. R. Bunsell: Testing methods for single fibers.


The book gives a clear overview over the current "state of the art" and is very informative. However, the subdivision into CVD- and ceramic fibers is astonishing because the presented CVD-fibers are counted as ceramic fibers as well. The main interest of this volume is concerned with carbon, glass and organic fibers although fibers of interest in ceramic matrix composites have not been sufficiently covered. This is probably due to recent improvements of the known fibers and the development of new fibers. In summary this book is of great interest for scientists working with reinforcing components.

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## Conference Calendar

The black hand symbol  denotes new entries into the calendar. Send information concerning conferences to the editorial office.

### November 1989

- 11–14 **Solid-State Devices**  
 19th Eur. Conf.  
Berlin (West)  
Contact: H.-C. Petzold, Fraunhofer-Inst. f. Mikrostrukturtechnik, Dillenburger Str. 53, D-1000 Berlin 33.
- 14–15 **Polypropylene**  
Madrid (Spain)  
Contact: D. Varley, Plastics and Rubber Inst., 11 Hobart Place, London SW1W 0HL, UK
- 14–17 **Superconductivity**  
2nd Int. Symp.  
Ibaraki (Japan)



Contact: ISS '89 Secr., ISTECC, Eishin Kaihatsu Bldg., 34-3, Shimbashi 5-chome, Minato-ku, Tokyo 105, Japan. Tel. 03/431-4002, Fax 03/431-4044

- 22–24 **Euromat '89**  
Eur. Conf. on Materials  
Aachen (Fed. Rep. Germany)  
Contact: Dtsch. Gesellsch. Metallkd., Adenauerallee 21, D-6370 Oberursel, FRG
- 23–24 **Superconductivity**  
Int. Conf.  
Paris (France)  
Contact: Dr. R. Suryanarayana, Lab. de physique des solides de Bellevue, CNRS, F-92195 Meudon, France
- 27–29 **Electronic Packaging**  
55th WE-Heraeus-Seminar  
Bad Honnef (Fed. Rep. Germany)  
Contact: Dr. V. Schäfer, WE-Heraeus-Stift., Heraeusstr. 12–14, D-6450 Hanau, FRG

27-2 **MRS Fall Mtg.**  
Boston (USA)  
Contact: A. Wagner, Materials Research Soc. (MRS), 9800 McKnight Rd., Suite 327, Pittsburgh, PA 15237, USA

27-2 **Electrical, Optical and Magnetic Properties of Organic Solid State Materials**  
Boston (USA)  
Contact: P. Chaikin, Dept. of Physics, Princeton Univ., Princeton, NJ 08544, USA, Tel. 609/452-4338

28-1 **New Materials**  
1st Int. Symp.  
Chiba (Japan)  
Contact: Nikkan Kogyo Shimbun, 8-10 Kudan Kita 1-chome, Chiyoda-ku, Tokyo 102, Japan

28-1 **Magnetism and Magnetic Materials**  
34th Annu. Conf.  
Boston, MA (USA)  
Contact: D. Suiters, Courtesy Assoc. Inc., 655 15th St., NW, Suite 300, Washington, DC 20005, USA

29 **Polymer Blends**  
Baden-Baden (Fed. Rep. Germany)  
Contact: VDI-Gesellsch. Kunststofftechnik, POB 1139, D-4000 Düsseldorf 1, FRG, Tel. 0211-6214-527

## December 1989

4-5 **Advanced Materials by Sol-Gel Techniques, Eurogel '89**  
Eur. Conf.

Strasbourg (France)  
Contact: Fraunhofer-Inst. f. Silicatsforsch., "Eurogel '89", Neunerplatz 2, D-8700 Würzburg, FRG

11-13 **CBE/MOMBE and Related Growth Techniques**  
2nd Int. Conf.  
Houston, TX (USA)  
Contact: H.-D. Shih, Univ. of Houston, Sci. and Res. One, 4800 Calhoun Rd., Houston, TX 77004, USA, Tel. 713-749-3701, Fax 713-747-7724

11-16 **Physics of Semiconductor Devices**  
5th Int. Workshop  
New Delhi (India)  
Contact: Dr. S. K. Sharma, IWPSD-89, Nat. Physical Lab., Dr. K. S. Krishnan Rd., New Delhi-110012, India, Tel. 586087

12-15 **Pacific Polymer**  
Hawaii (USA)  
Contact: J. C. Vogl, Pacific Polym. Federation, Polytechnic Univ., 333 Jay St., Brooklyn, NY 11201, USA

20-22 **Thin Films and Multilayers**  
Mtg.  
Warwick (UK)  
Contact: Inst. of Physics, Magnetism Group, 47, Belgrave Sq., London SW1X 8QX, UK

31-2 **Corrosion-Erosion-Wear of Materials at Elevated Temperatures**  
4th Int. Conf.  
Berkeley, CA (USA)  
Contact: A. V. Levy, Lawrence Berkeley Lab., MS 62-203, Univ. of Calif., Berkeley, CA 94720, USA, Tel. 415-486-5822

## January 1990

10-14 **Superconductivity**  
Int. Conf.  
Bangalore (India)  
Contact: Prof. S. V. Subramanyam, ICSC, Dept. of Physics, Indian Inst. of Sci., Bangalore 560012, India, Tel. 91-812-344411, Fax 91-812-341683

14-19 **Electro Optics**  
Conf.  
Los Angeles, CA (USA)  
Contact: SPIE, POB 10, Bellingham, WA 98227-0010, USA, Tel. 206-676-3290, Fax 206-647-14445

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