
The second edition appeared twenty years later, in 1998. It included the material of the first edition, and a series of appendices. The first, *Retrospective*, reviewed developments of the 20 years between the two editions, especially, solutions of the open problems proposed in the first edition. The other seven appendices surveyed new fields. They were written by the best experts available. Obviously, I could no longer command an overview of all of lattice theory. The book provided foundation, the appendices surveyed contemporary research.

The explosive growth of the field continued. While the nineteen sixties provided under 1,500 papers and books, the seventies 2,700, the eighties over 3,200, the nineties almost 3,600, and the first decade of this century about 4,000. As a result, it became almost inevitable that we split the book into two volumes.

This book, *Lattice Theory: Foundation*, lays the foundations of the field. There are no *Retrospectives* and no lists of open problems. Its companion volume, *Lattice Theory: Special Topics and Applications*, completes the picture; it is written by experts in the various topics covered.

To help the readers of this book to acquire a wider view, almost a thousand exercises are provided. And there are over forty *diamond sections*, brief sections marked by the symbol ♦, that provide brief glimpses into research fields beyond the horizon of this book.
Contributors

The following mathematicians contributed diamond sections:

- Kira Adaricheva (Sections VI.2.7 and VII.2.7);
- Gábor Czédli (Section V.1.9);
- Brian A. Davey and Miroslav Haviar (Section VI.2.8);
- Kalle Kaarli (Section II.2.5);
- Jimmie D. Lawson (Section I.3.16);
- Joseph P. S. Kung (Section V.5.13);
- Tibor Katriňák (Section V.1.8);
- J. B. Nation (Section IV.4.4);
- Hilary A. Priestley (Section II.5.6);
- Aleš Pultr (Section II.5.7);
- Manfred Stern (Section V.2.6);
- Friedrich Wehrung (Sections III.4.4, IV.5.5, V.5.11, and V.5.12).

I am deeply appreciative to all of them.

Acknowledgements

To keep this Preface short, I put the history of this book and the very extensive acknowledgements into the Afterword. But let me repeat one point made there. I started writing this book in 1968. In the forty plus years of this endeavor, I received help from hundreds of mathematicians. I am forever grateful.