

# Voronoi's Impact on Modern Science

## Book 4

Drahomanov National Pedagogical University (Kyiv, Ukraine) proposes to your attention the Proceedings of the joint conference of the 5th International Symposium on Voronoi Diagrams in Science and Engineering (ISVD-2008) and the 4th International Conference on Analytic Number Theory and Spatial Tessellations held in Kyiv on September 22-28, 2008 under the common title "Voronoi's Impact on Modern Science". As 2008 is a memorial year for Georgiy Voronoi (1868-1908), the joint conference has taken place on his native land.

The book consists of two volumes:

Volume 1: Proceedings of the 4th International Conference on Analytic Number Theory and Spatial Tessellations (Eds.: A. Laurinćikas, J. Steuding),

Volume 2: Proceedings of the 5th International Symposium on Voronoi Diagrams in Science and Engineering (ISVD-2008) (Eds.: D.-S. Kim, K. Sugihara).

The contents of these volumes can be found at the URL:

<http://www.imath.kiev.ua/~voronoi/proceedings.html>

In addition, the CD containing the both volumes with coloured figures is issued. In CD there is also Voronoi's textbook on the differential and integral calculus (610 pp., in Russian, issued in Kyiv in 1914).

At present time the eminent Ukrainian scientist G. Voronoi belongs to the very often cited mathematicians. He worked mainly in the Number Theory and his large fundamental works are well known now, each of them opened new domain of research in *analytic number theory*, *algebraic number theory*, *theory of functions*, he essentially contributed to *geometry of numbers*, a field introduced by H. Minkowski. Even his small notes gave the original outlook to the considered problems and new unexpected approach for their solutions, influenced the further development of a given problem. But only in our time the real significance of his works became fully elucidated. His works gained considerable importance in the last thirty years due to development of the modern fields of science: *computer graphics*, *image recognition*, *artificial intelligence*, *ecology*, *molecular biology*, *radiation physics*, *cosmology*, *chemical engineering*, *physical chemistry* etc., and the usage of "Voronoi diagrams" in all these and many other domains.

Since 1993, once in five years, there were four international conferences in Kyiv devoted to the influence of Voronoi scientific work on the development of modern science. The topics of these conferences are related to the all research areas where Voronoi made his contribution. The proceedings of the first three conferences were published under the common title "Voronoi's Impact on Modern Science" (books 1-3).

Since 2004 the annual International Symposia on Voronoi Diagrams (ISVD) are held in different countries of the world: Japan (Tokyo, 2004), Korea (Seoul, 2005, organized by the Voronoi Diagram Research Center in Seoul), Canada (Calgary, 2006), United Kingdom (Glamorgan, 2007). The proceedings of the symposia (ISVD) were issued by their organizers.

We ask institutions and private persons wishing to order the both volumes of the book (or some of them) to call to the following e-mail address: [voronoi@imath.kiev.ua](mailto:voronoi@imath.kiev.ua)

The price of two volumes and the CD (postage included) is Euro 50.

The price of one of the volumes and the CD (postage included) is Euro 30.