

# Foreword

*Aleksandr Danilovich Alexandrov* (1912–1999) is usually ranked as second to Gauss in surface theory. This appraisal rests primarily on his masterpiece whose English translation lies before the reader.

There is no need in expatiating upon the content of this book since the main ideas of geometry “in the large” have been placed in the treasure trove of modern science half a century ago. The reader will be pleased to taste the original presentation of such fundamental concepts as shortest join, intrinsic metric, angle, curvature, etc.

For this reason my introductory words are kept at a minimum, confining merely to those of pride and apology.

It was in the mid 1990s that Alexandrov asked me to help him in editing this translation he chose as the second volume of his *Selected Works*. We agreed with him from the very beginning that no modernizing comments will be added to the book since the area of geometry in the large is impossible to embrace these days. So the reader can feel the original flavor of invention which is undoubtedly spoiled in translation. I am proud of this opportunity to return a trifle to the brilliant person whose genius, charm, and sympathy are listed as decoration and consolation of about two decades of my life.

I also offer my sincere words of apology to the reader for the crushing defeats I has suffered as editor in the severe battle against mistranslation and solecism. Unfortunately, my inspired teacher and long-time interlocutor had no chance to look through this translation but I am pretty sure that no blunders of mine nor the translator’s nor anybody else’s can ever conceal the keen mind and farsighted vision of Alexandrov, a geometrical giant of the 20th century.

S. S. Kutateladze  
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