

# Preface

This is based on the record of how I have been discovering and pioneering a new world by breaking the first of the Ten Commandments of Mathematics, which has been 2300 years since Aristotle and must not be divided by zero. I am involved in the basic issues of humankind involved in mathematical physics, philosophy, and worldview. What is eternity and what is infinity? What is the significance of human existence?

A rare discovery in the world, the discovery of division by zero and its development have been published as a book, and the publication of an international specialized journal was determined on 3 June, 2021. Therefore, I would like to express the process focusing on general topicality that goes beyond mathematics. Since the early days of the discovery, we consider this discovery to be a historic event, and have written and stored enormous materials in statements and blogs of the Institute for Reproducing Kernels. Therefore, the description etc. are stated accurately. By the way, the statements of the Institute for Reproducing Kernels have been related to division by zero in the last 7 years, and since 2014, there have been 7, 17, 25, 18, 27, 31 items, and 38 items in 2020. We can see how huge the amount is. Since Bungeisha published the book *Pre-dawn-Yochan's thoughts* (pages 218, 2009, in Japanese) with the statement number 27 of the Institute for Reproducing Kernels, we can see the abundance of the contents. In addition, the process of making a statement

goes beyond the content of mathematics and describes the time of making, the environment in which it was made, and the feelings, so they provide a valuable record. Therefore, I would like to refer to those records together. This is a record of 7 years from the discovery of division by zero to the publication of the book.

In addition, both the statements and blog of the Institute for Reproducing Kernels are wanted to build a good society, so I wrote the expression of frank feelings, and I wrote with the feeling that I thought and felt in that way at that time.

After retiring from the university, I was invited as a researcher at the University of Aveiro in Portugal for five years since 2009, and was given an extremely blessed research environment. Since my duties were all about research, I was able to concentrate on my research, and I was able to publish a research book on lifework, *Theory of Reproducing Kernels and Applications* (English 452 pages, 2016), from Springer with the cooperation of Professor Yoshihiro Sawano. The publishing plan began before retirement, and publishing took 7 - 8 years. Therefore, even during the above period, research other than division by zero was a big task. Life during my stay at the University of Aveiro is comprehensively summarized in Statement 162: Aveiro—Eden's Garden.

Statements of the Institute of Reproducing Kernels were written carefully in Japanese as in arts and poems, and their translations to English are rough, however, the repeated statements and their translations will represent the author's ideas and feelings sufficiently.

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On the contrary, ambiguous expressions will enrich our imagination and ideas. The translations may be considered as abstracts of the original statements. Dead trees are also busy in the mountains.

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