

Preface

This is Part 3 of the “Special Issue Dedicated to Ivo G. Rosenberg.”

Part 1 and Part 2 appeared in Vol. 36, No. 4–5 (2021) and Vol. 38, No. 1–2 (2022), respectively, of the *Journal of Multiple-Valued Logic and Soft Computing*. The contents of all three parts are listed at the end of this Preface.



Ivo George Rosenberg
1934 – 2018

Ivo Rosenberg was born on December 13, 1934, in Brno, Czechoslovakia (now, the Czech Republic) and passed away on January 18, 2018, in Brossard, Canada.

Throughout his life, Ivo Rosenberg was a highly active and productive mathematician. He published over 230 papers with more than 60 co-authors.

Photo: Courtesy of Marc Riedel

His research interests ranged over multiple-valued logic, general algebra and discrete mathematics. Clone theory was the center of his interests, and he used relations as a key tool in his investigations. He characterized the maximal clones on finite sets via relations, and he studied the rigidity problem described by relations.

The photo on the previous page shows Ivo Rosenberg in his early days. This photo was taken in 1970 when he was a professor at the University of Saskatchewan (1968–1971). The year of 1970 was a memorable year for him and for us as his best-known paper – the complete description of all maximal clones on finite sets – was published with a full proof in this year. This is a monumental work that has had great impact on clone theory as well as multiple-valued logic and algebra in general. (See the paper on Ivo Rosenberg’s work included in this volume.) In 1971, Ivo Rosenberg moved to the Université de Montréal and worked there as a full professor (1971–2011).



Nature was Ivo’s friend. He liked to take a walk in the woods on hills and mountains. The above photo was taken around 2005 in his cottage in Magog, Québec. The cottage is surrounded by full of nature with beautiful scenery. For many years Ivo enjoyed his life at this cottage with all his family: his wife Loty, his daughter Misha, his son Marc, and his grandchildren.

I (H.M.) also have a personal pleasant memory about this cottage. In the autumn of 1998, Ivo and I had a discussion on some mathematical problem during our stay at the cottage. It was the time when the leaves of the trees around us were changing their color beautifully. In the daytime we walked

Photo: Courtesy of Misha Rosenberg

and talked on a hill and a small mountain near the cottage, and at night we concentrated on our problem. Our discussion resulted in the paper entitled ‘Gigantic pairs of minimal clones’.

Part 3 of the Special Issue contains four contributed research papers. They are followed by a paper honoring Ivo Rosenberg’s work, which presents some of his most influential results and their impact on logic, algebra and computer science. Part 3 concludes with a complete list of Ivo Rosenberg’s publications.

We are grateful to all authors who joined us in honoring the memory of Ivo Rosenberg by submitting their work to the Special Issue. Some of the papers could not be included in this issue. Nevertheless, our thanks go to those authors as well.

The publication of Part 3 was significantly delayed. We apologize for the delay. Particularly, our deep apology goes to the authors of the contributed papers of Part 3, who kindly had patience waiting for the publication of their papers for several years.

As a friend and a colleague, Ivo was a man of kindness and friendship. He had extremely warm and humble mind, which was recognized and appreciated by all who knew him. We express the deepest respect and gratitude to him.

Six years have already gone by since Ivo Rosenberg passed away. However, the academic influence of his work lives on.

With our heartfelt gratitude, we dedicate this special issue to this great mathematician.

June 18, 2024

Editors of the special issue

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