

Editorial

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Welcome to this Special Issue of the International Journal of Chemical Kinetics in honor of our colleague and friend Dr. Joe. V. Michael. Joe was an Emeritus Scientist at Argonne National Laboratory, who passed away on 17-March-2019. Joe made pioneering contributions in gas-phase chemical kinetics, particularly in the development and application of sensitive light absorption techniques to measure absolute rate constants for elementary reactions in atmospheric and combustion chemistry. The collection of articles in this memorial issue is an homage to Joe and to the role of such pioneering measurements in advancing modern theoretical kinetics, a cause espoused by Joe during his 50-year career that encompassed the age of modern gas-phase chemical kinetics.

The journal opens with a short essay reflecting on Joe's career written by Dr. Raghu Sivaramakrishnan and Prof. John Barker. Raghu was one of Joe's final post-doctoral scholars. Several years before Joe died, Raghu transitioned to a staff position at Argonne National Laboratory where he worked closely with Joe until Joe's retirement. Raghu remained a good friend of Joe's and kept him up to date with the research at Argonne which continued to be important to Joe. John, on the other hand, met Joe somewhat earlier in Joe's career. John was Joe's first graduate student and like many of us came to know Joe as a good friend and colleague. The essay by Raghu and John provides wonderful insight into the extent of Joe's career and his importance to the fields of gas phase kinetics and combustion.

Within the pages of this issue, there are papers that span a wide range of topics from shock tube studies to elucidate detailed kinetic and mechanistic data to methods of modeling complex reaction systems. The papers have been contributed by groups from many countries and authored by colleagues that Joe knew throughout various stages of his extensive career. This Editorial concludes with a section of tributes and memories of Joe.

We thank all the authors for contributing to Special Issue and hope you enjoy the research and have fond memories of Joe while perusing the journal. It has been an honor and a pleasure for us to work on this issue.

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Guest Editors.

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