

The Petrovic Chronicles – Non-Equilibria Rules

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Professor Zoran Petrovic has been a unique, and major contributor to the field of Gaseous Electronics for almost 40 years. His research and applied work has been highlighted by the extensive international collaborations that it has involved, encompassing work on (at least) 4 continents. Zoran's unique contributions have been to straddle, and link, the gas discharge physics and AMO collision physics communities with both theoretical and experimental work, inject suggestions for new data needs and, where appropriate, suggest sets of collision cross sections that can be more broadly used in modelling and other studies.

The applications of his fundamental work in transport measurements, cross section derivations and optical emission from low temperature gas discharges (to name a few) are many and varied. His applied work cover fields as diverse as discharge and plasma diagnostics, microelectronics, wool treatment, seed germination, plasma medicine, surface treatment, gas breakdown and particle traps. This talk will attempt to summarise his main contributions to the field.