

## Critical Review

It was a presentation about “Data-driven Engineering Modelling: Is it a Reinvention of old Technology or a new genius Paradigm?” by Professor K.C. Park. This was delivered on 15<sup>th</sup> October 2019 at the O.C. Zienkiewicz Conference room, UPC Campus Nord as one among a series of academic seminars.

Professor K.C. Park introduced himself which was followed by a briefing about Aerospace which he believes as the most diverse engineering stream. He seemed obvious with the potential of Aerospace technology to cover every other Engineering fields. After briefing about Aerospace, he brilliantly took a diversion into system identification process and started explaining about Applied Mechanics. He took a question, “Are we taking the full advantage of Applied Mechanics?”. In explaining the answer to this question, he drove through the vastness of the subject and quoted interesting facts and examples. The next few slides were about the history of Applied mechanics and the gradual advancement in this study field. He carefully utilized some of the appropriate quotes from the greatest mathematicians like Galileo and Lagrange which were very easy to relate to his point of view.

His voice modulation was appreciable, and he was clearly audible to every corner of the hall. Personal experiences were shared to make the topic more interesting. This presentation was prepared considering both technical and non-technical audience and everything was explained in sufficient weightage. Basic concepts like, simplification of multiplication and division with the help of logarithmic approach were also a part of the presentation.

After a brief introduction, the presentation went on focusing Numerical modelling as well as Data and graphics-driven modelling. Major three ingredients for data drawn modelling (computer graphics modelling, signal processing capability and system identification framework) were explained individually with appropriate examples. Advancements in data driven modelling were discussed and compared with classical mathematical models. The whole presentation was concluded with some recommendations for engineering mathematics educators.

There were questions raised by the audience regarding his stance over the role of youths in the upcoming revolution of such technologies. Interestingly, he took on the side of youths and expressed a sorry note for the experienced group. All the questions were attempted with descriptive and satisfying answers.

Overall, it was a well-planned presentation from a pundit targeting the right group of audience and that resulted in a healthy knowledge sharing and exchange of opinions. He almost took a controversy by calling European Education System to have some loopholes but was clever enough to express his concern with adequate words. Even though the presentation did not cover all the technical aspects of Data-driven Engineering modelling, it was informative enough to give an overview of the technology and gain attention of the gathering.