Aim & scope: Dr. Jean-Marie Proth (http://proth.jean-marie.monsite-orange.fr/) passed away on June 17, 2021. Jean-Marie was a pioneer and leading scholar in many directions of industrial engineering and operations research. He contributed a lot to the production planning and control domain: flow control, scheduling, planning, and hierarchical production management. Dr. Jean-Marie Proth advised/supervised tens of professors and scientists who are now leaders in these areas. Jean-Marie worked on solving systems of partial differential equations, especially for the design of buffer stocks, the development of specific algorithms for some scheduling problems in real time, supply chains engineering, assembly line balancing, and bin-packing problems. His results in the modeling, analysis, and evaluation of discrete event systems, especially Petri Nets for modeling and analyzing the behavior of discrete event systems, data analysis for design of production systems, innovative tool to perform cross-decomposition for group technology (called GPM). The algorithm GPM was used not only in the group technology and layout design, but also to decompose linear systems of very large size in order to approximate the solution. Many other research problems were solved by Jean-Marie Proth. Among others, for city logistics, an algorithm was proposed which proceeds by division of the territory and can guide a vehicle in a city, taking into account fluctuations in traffic, etc.

Keywords: hierarchical production management, production planning and control, scheduling, buffer allocation, assembly line balancing, bin-packing, inventory control, replenishment planning, discrete event systems, Petri nets, group technology, facility layout, stochastic systems, data analysis, clustering, combinatorial optimization.

Selected books:

Contact person: alexandre.dolgui@imt-atlantique.fr

Deadline for submissions (please use the code, see above): March 15th, 2022

For author guidelines, please refer to www.mim2022.com