

AIChE Journal Virtual Issue on Process Systems Engineering **Ignacio Grossmann and George Stephanopoulos**

AIChE Journal has posted the first part of the Virtual Issue on Process Systems Engineering:
[http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1547-5905/homepage/pse_virtual_issue.htm](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1547-5905/homepage/pse_virtual_issue.htm)

The virtual issue on Process Systems Engineering includes the top 210 cited papers that have been published in the area of Process Systems Engineering at the AIChE Journal since its inception. All papers except two have 46 or more citations, and they belong to the 1,500 top papers of AIChE Journal in terms of number of citations.

While the number of citations is not always equivalent to high quality papers or their positive impact in an area, it is a simple and unambiguous measure that attempts to establish the potential impact that a technical article may have had. We have decided to put together this virtual issue with two major goals in mind. On the one hand it is an interesting exercise to display those articles in PSE that presumably have had a large impact. On the other hand it is useful to gain some insights into the historical trends of PSE-related research subjects over the last 55 years. We of course acknowledge the fact that highly cited papers that have had a high impact in PSE have been published in other journals such as Computers and Chemical Engineering, Industrial Engineering Chemistry Research and Chemical Engineering Science. In that sense one should keep in mind that this virtual issue only provides a partial view of PSE, which has become a strong and broad core area of chemical engineering.

The 210 papers of the virtual issue have been organized into the following four parts, with the citation count shown below:

- Part-A: Process Modeling, Simulation and Optimization.
- Part-B: Process Synthesis and Design.
- Part-C: Process Identification, State Estimation and Control
- Part-D: Process Operations: Optimization, Monitoring, and Fault Diagnosis

No. of papers	Citations	Citations/paper	
Part-A	57	6,275	110
Part-B	52	4,234	81
Part-C	61	4,395	72
Part-D	40	4,141	104

We hope that this virtual issue will bring not only fond memories to the senior researchers in the PSE area, but that it will help to inspire the young generation of researchers in PSE.

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