WEBINAR 3 REVIEW

Content

Overall content ★★★★★

Appropriateness of speaker ★★★★★

★★★★★ 4.8/5

Biggest takeaway from Webinar 3

Best teaching practices in Chemical Process Design still are needed given the new challenges in energy and product transition to more sustainable future.

Testimonial from participants

Thank you very much for your helpful webinar. It was great and I look forward to your next webinars.

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Webinar 3 – FeedBack from Poll

Pre-Evaluation Poll

	Results (52 Answers)
1. Which of the following best describes yourself?	
Lecturer – teaching process design	52%
Lecturer – not teaching process design	15%
Student	23%
Industry	10%
2. What are your expectations for today's webinar?	
I am hoping to learn something new	Strongly Agree
I mostly want to listen	Agree
I plan to participate in discussions	Agree
I plan to ask questions	Agree

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Webinar 3 – FeedBack from Poll

Post-Evaluation Poll

	Results (30 Answers)
1. Which of the following best describes yourself?	
Lecturer – teaching process design	57%
Lecturer – not teaching process design	17%
Student	13%
Industry	13%
2. What are your expectations for today's webinar?	
I am hoping to learn something new	Strongly Agree
I mostly want to listen	Strongly Agree
I plan to participate in discussions	Disagree
I plan to ask questions	Strongly Disagree
3. How would you rate the overall webinars experience?	**4.84/5**

	Results (30 Answers)
4. Please select the option which most accurately reflects your opinion about Webinar content	
Overall contents of the Webinar	Excellent
Appropriateness of speaker for the content	Excellent
Appropriateness of timetable	Good
5. Please select the option which most accurately reflects your opinion about Webinar platform	
How would rate the Webinar platform (Zoom)?	Excellent
Please rate the audio quality	Excellent
Please rate the visual system quality	Excellent
6. Will you join us for our future Webinars?	Yes, Definitely

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Webinar 3 – FeedBack from Poll

What was your biggest takeaway from the webinars?

- Structure of the process design course.
- Process heat integrations
- There is a lot more to contribute , and integrate the needs of the present, and future into the Education curriculum
- Motivation of informed teaching process.
- Process Simulators in Chemical Engineering
- I have been informed of my lack of process design knowledge and it has ignited the interest in me to seek for more information and understanding.
- The need to work side-by-side with the student during the capstone project
- This was an extensive and a very fascinating topic, in future it may be considered to divide into two webinars.
- To identify approaches on how a process design course should be given. Particularly topics and modelling methodologies.
- Good ideas to implement (some of them modified) in my classes.
- The answers given by the eminent professors Warren and Daniel for different questions.
- a comparison between teaching methods and contents in different universities
- I learnt a lot about the actual syllabuses of plant design for Chemical Engineers.
- HEN and Economics aspects
- the overall structure and benefits of the book and how it's used in teaching in world leading institutions
- Currently the process design involves complex tasks, and the methodologies to teach to students must be coupled with the new technologies
- An overview of interesting topics to teach in a course of process design.
- Best teaching practices in Chemical Process Design still are needed given the new challenges in energy and product transition to more sustainable future.
- Determine a best way to separate components

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Webinar 3 – FeedBack from Poll

What topics would you like to see at future Webinar?

- How to teach Product Design
- On the relevant topic, I'd hope for equipment design.
- On the complete novel topic, machine learning or AI in Chemical Eng.
- chemical process research scope on aviation fuels
- integration of environmental analysis into every steps design. How to efficiently monitor the contributions from the students in a group design project.
- Semiconductor processing.
- Design in control System
- Thermodynamics and Transport Phenomenon
- Bioprocess Design focusing in membranes separation modeling, simulation and optimization
- Ideas not coming immediately :)
- Reactor Engineering, how it has evolved after 70 years of its conception in Chemical Engineering curricula.
- A follow up on teaching process simulation.
- Carbon Capture and Sequestration, Green Hydrogen
- A sample presentation of a final student project
- I want to see the discussion about pesticide design.
- Real time optimization and equation oriented mode in ASPEN
- Use of ICAS and associated tools for bioseparations. Modelling proteins, vaccines manufacturing. Property prediction for surfactants and proteins and vaccines if possible.
- Solid separation prediction / flowsheet design.
- Optimization under uncertainty
- More seminars for teaching Chemical Engineering core and related subjects.
- Sustainability metrics and life cycle assessment. Multicriteria decisions in process design.
- pyrolysis of plastic and separation of effluents

Webinar 3 – FeedBack from Poll

Please share any additional comment or suggestion that would help us for next webinar

- It's a bit pity that the time allocated for the last topic was too short
- More research scopes of chemical process engineers.
- Please reduce the content to the manageable level, and give more room for discussions
- These topics are so important that they individually need more time and different time slot to be understood completely. It would be useful if the presentations' soft copies were available.
- It would be interesting if we could have the presentation before the webinar
- A discussion table might help to debate contents and today's approaches.
- Include small breaks so that if the talk takes longer, there is no need to shorten someone's participation.
- Please increase the duration of the webinar for more discussions.

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Webinar 3 – Questions/Comments

No.	Name	Question/Comments
1	Soledad Diaz and Patricia Hoch	Hi good morning. We would like to know if the contents of this book are taught in a single course
2	Asad Sahir	When an instructor teaches process design, they may come across a situation where they learn that a student may not have been able to grasp a fundamental concept effectively in Chemical Reaction Engineering/Separation Processes/Thermodynamics, which should have been covered earlier? What may be the role of the process design instructor to facilitate learning in this scenario?
3	Sarath Babu Anne	Is it possible to cover theoretical aspects related to product design, process design, synthesis, Equipment design, Mechanical design, P&ID, ULD, Economics, Safety, LCA, Energy integration as part of 2 to 3 courses on design?
4	Mahboubeh Toghyani	High, good morning. Thanks from your very helpful and practical webinar. Should we include life cycle analysis and sustainability topics in detail, when teaching process design? or as included in "Product and process design principles" very briefly? I ask this question because these topics are highlighted these days more and more.
5	Alvaro Orjuela Londono	What is the size of your classes?, what is the size of working teams?, how many teaching assistants do you require?, do you follow a problem-based teaching, and if so, do students do a design of an entirely new process or product, or rather a road-mapped example?
6	Sarath Babu Anne	What shall be the minimum number of design courses in an undergraduate program?
7	Chinmoy Basak Mukta	1. As an undergraduate student from BUET from Bangladesh, I had a wonderful experience of learning process design from an Experienced Process Design Engineer, the experiences shared in that course immensely helped and motivated me, during my own professional experience at an oil and gas EPC, later. So my question is can we or how can we involve experienced process engineers in the learning experience of student?
8	Chinmoy Basak Mukta	2. Introducing Process Design Standards: (i.e. API, CCPS, etc). Can we introduce the importance of design standards during design course?
9	Iqbal Mujtaba	Can engineering ethics vary from country to country? If yes, how do we prepare our graduates for international market? Decolonisation of curriculum is a big buzz in the UK at the moment.
10	D. Juarez-Romero	Kindly, discuss about the decision of 1 project per class. Or several projects. one project per team. With the possibility of integration. Thank you (no oral participation required).
11	Joan Cordiner	Have you thought about how you will change the book with increasing non petroleum future.
12	Seyed Soheil Mansouri	How would be setting in combined programs where, for example, students take part of their education with the industry?
13	Mo Zandi	How individual student contribution is assessed in group projects? Particularly, in case of online projects?
14	Rizqy Romadhona Ginting	What courses should be a prerequisite for students before taking the Process Design course? Thank you
15	Asad Sahir	In my understanding, the heuristics were conceptualized based on the experience gathered from commodity chemicals and conventional chemical engineering unit processes? May you share some reflections where new heuristics may possibly evolve from processes based on biopharmaceuticals, vaccine manufacturing, hydrogen electrolyzers?
16	Kanya Citta Hani Alifia	In my experience as a bioprocess/chemical engineering student some years ago, we typically designed a process or a plant by benchmarking to an existing process flowsheet either from a patent or a publication. Is this approach not desirable compared to the heuristic-based approach? Would it be okay to do benchmarking if we can provide our understanding of the heuristics and why the flowsheet is designed that way, as well as provide changes when necessary?
17	Jau Choy, Lai	For the Product Design course, is software applications (e.g. ICAS) part of the course content and how it is delivered? Besides ICAS, is there any other software which you think the students should be exposed to?
18	Jaime David Ponce Rocha	When you use second law analysis, what type of exergy is most relevant (physical, or chemical)?
19	Asad Sahir	When teaching plant wide control, may you share some experiences with dynamic simulation software?
20	Mahboubeh Toghyani	What software you propose your students (chemical engineers) to design control systems?

Webinar 3 – Questions/Comments

No.	Name	Questions/Comments
21	Pornsiri kaewpradit	could you please identify the scope of the project assigned to the student group?
22	Joan Cordiner	Have you experience of bringing in alternative fuel and raw materials from non petroleum- eg electrolysis , CO2 capture and reuse to make organics.
23	Joan Cordiner	As an industrialist I found the universities that gave some thought and a short handbook of what was required from an industrials was really helpful, so I/ my team didn't provide something that isn't useful. NC State have a really nice model that has some key deliverabiles that re the same for everyone in three sections. 1. Overall plan 2. Initial PDF and 3. Detailed Design with a couple of sections of analysis e.g. Hazan/ Hazop, Ethics, Sustainability but not all.
24	Amit Kumar Gomey	Sir i did not submit the feedback and it got closed automatically
25	Pornsiri kaewpradit	thank you for sharing
26	Amit Kumar Gomey	Sir I want to learn aspen modelling, which will be the best book for it?
27	Soledad Diaz and Patricia Hoch	Thank you very much for the enriching seminar. We are currently modifying the CE curricula in our department and it is great to know that we are teaching most the topics you mention in different courses. And also to know that some topics are missing and have to be included. We are very fortunate to have three professors from industry that collaborate with us in the advanced design course. Thank you again!
28	Artur Schweidtmann	Thanks a lot for the lectures and organization of this webinar. I very much enjoyed it and learned a lot. This will help us to improve our process design course as well. Unfortunately, I need to leave already. I am looking forward to future webinars and discussions. Best greetings from Delft Artur
29	Miguel A. Morales Cabrera	Thank you very much. Great webinar!
30	Seyed Soheil Mansourr	It was an excellent webinar. One last remark for me that remains is how do we couple this material and practices, i.e. simulations-based with hands-on pilot scale experiments - perhaps they are essential but costly and limited resources. How much do you see the benefits of VR and XR technologies`?
31	Mourad KORICHI	Thank you very much for the enriching seminar.
32	Joan Cordiner	thank you everyone, great seminar.
33	Mario Eden	CATME teamwork assessment: https://info.catme.org/
34	Jaime David Ponce Rocha	Thanks for answering my question, great webinar!
35	Fernando Gomes Martins	Thanks for the great webinar.
36	Joan Cordiner	We use a peer review scoring sheet on a google form the students can score between 80-120 of themselves and peers and have to put comments to explain. We will have a look at Catme
37	Mario Eden	Clarification on CATME: It is only for assessing team performance/contributions. Not necessarily for grading.
38	Mahboubeh Toghyani	Thank you very much for your helpful webinar. It was great and I look forward to your next webinars.
39	Seyed Soheil Mansouri	Thank you very much. Excellent work
40	Sharon Orta	Please, what is the youtube channel please and are we able to access it?

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