

## Three-Days Workshop on Membrane Separations - Theory and Techniques in Bioprocessing (25-27 Feb 2016)

### Evaluation Results

Category	Avg(Min-Max)Count	Rating Scale	
<b>Section 1- Event administration</b>		1	Bad
Quality of pre-event (queries, workshop registration process timely & efficient? )	5.84(4,7)19	2	Well below average
Quality of Staff responsiveness	6.15(4,7)19	3	Below average
Pace of the event (time mgmt)	5.84(5,7)19	4	Average
Overall satisfaction with event organization	5.84(4,7)19	5	Good
<b>Section 2- Event facilities</b>		6	Very Good
Venture Center Room (Was it appropriate, clean & comfortable?)	5.26(3,7)19	7	Excellent
Venture Center Cafeteria (Was it appropriate, clean & comfortable?)		<b>How did you come to know about this event?</b>	
Food and beverages at the event	6.10(5,7)19	VC mailing list	2
<b>Section 3 – Training &amp; Practical Sessions</b>		NCL mailing list	2
Day 1 - Membrane structure, membrane materials (Talk)	5.89(4,7)19	Communication from BIRAC	6
Day 1 - Ceramic membranes (Talk)	5.78(4,7)19	others	9
Day 1 - Preparation of flat sheet membrane (Lab demo)	6.36(4,7)19		
Day 1 - Performance of ceramic HF (Lab demo)	5.68(3,7)19		
Day 2 - Theory of Microfiltration, Ultrafiltration, Nanofiltration and Reverse Osmosis (Talk)	5.89(4,7)19		
Day 2- Application of Membranes in Food Processing and Beverages (Talk)	6(5,7)19		
Day 2- Membrane Distillation (Lab demo)	5.63(3,7)19		
Day 2- MF of fermentation broth (Lab demo)	5.84(4,7)19		
Day 3- Visit to Membrane manufacturing facility (UniqFlux)	6.31(5,7)19		
Day 3- Case studies and calculations (Talk)	5.31(4,6)19		
Day 3- Analysis of Experimental Data (Talk)	5.47(4,7)19		
<b>Section 4- What did you like best about this workshop?</b>			
Combination of lectures with practical Demo is good concept which I liked the most			
Lab demo at nclIndustrial visit			
Diversity in the subject and connectivity.			
Membrane casting and industrial visit			
The best part was the visit to uniflux.			

Unique with respect to content
Sharing knowledge and concept clarification.
All aspects are good.
Industrial visit.
Preparation Of membrane & guidance of nene, kharul & ragavarao
The overall staffs involved in this workshop were excellent in teaching, explaining the concept, clearing doubts etc.
Every session were wonderful, specially visit to Dr. Ulhas Kharul's lab and industrial visit
Practicals/experiments
Content and practical exposure
Visit to industry
Questions and answers Explanation of problems
Interaction with intellectual people
Information and hands on execution of membrane application
Faculty members are very open to all issues raised by the participants. The initiative taken by venture center for start up and incubation of technology driven companies are really awesome.
<b>Section 5- What did you like least about this workshop?</b>
Needs improving in lab demo experiments in terms of data capture and analysis of results with some conclusion. May be group of two or three.
No much information was provided about my domain i.e. water and wastewater.
It should be more application oriented.
The timing of the presentations. It's become monotonous. I will like To reduce the presentation time of the speaker or topic can be covered can be covered in different session.
Focus should have been in one type of industry, e.g. pharma or biopharma
It is best to introduce with latest technologies.
Management of activities like lab demos.
Need more details on case studies
Biopharmaceutical application was less.
I guess paneer dish in lunch
Scope of case studies
Practicals were difficult to follow due to overcrowding in lab space
Not much thrust on industrial problems in membrane separations
No comments
Overall it is not bad
The coordination and arrangement of the event can be improved.
<b>Section 6 - Comments and suggestions :- Please include if the talk met your expectations. How do you think can these workshops be improved further?</b>
Need case study which are scaled up....with cost benefit analysis.
No its ok

Yes, more detailed experimental case studies may be selected from one of the participating industry representative.
To increase the number of days of the workshop.
Same as above
Its informative and deffenately show the best impacts.
Perfectly organized.
More of practical sessions. Shorter theory sessions and more of case studies involving the problems faced in industries.
The workshop can be seperated in different part like membrane delegation technology in biopharmaceutical, food processing etc. This will help the individuals of different industry to improve their knowledge and also they can utilize their learning at their place.
More technical information on membrane fabrication
Whole workshop can be divided into different classes such as basic and advanced, so that some body may be interested in only basic course and others may be in advanced.
Smaller groups of maybe two or three people for practical sessions.
More focus on industrial problems
Instead of three days, it can be arranged for 4-5 days
Further application of membrane like enzyme immobilization and complement of column separation of choral molecules need to be addressed
1. One to one interaction with the member faculty to tackle with a particular issue. 2. The theory & practical sessions can be categorized based on the application or for the participants coming from a particular type of industry like for pharma, health care or allied industry like for algal separation.
<b>Section 7- Please suggest a topic on which you wish to have a workshop on ?</b>
Details on chromatographic saperation by membrane. This is pharma major problem
Membrane applications for water and wastewater.
More l'm depth membrane characterization and more focus on RO.
Problems associated with scale up in bioprocess.
Development of fermentation process for production of therapeutic proteins. Statistical methods.
Application oriented.
Venture centre facilities for upcoming start ups
Scale up of bioprocesses.
Use of membrane separation technology for biosimilars.
Polymer chemistry for membranes
Application of membranes in water and wastewater treatment technologies like, MBR, RO, EDI, Prefiltration etc.
Membrane applications in fermentation industry.
Protein purification using monolith columns
A workshop dedicated on fabrication of membranes (including ceramic membranes)
Application wise comparision of ceramic versus polymeric membranes
1. Workshop on algal separation by membranes.2. Solid liquid separation3. Water/waste water treatment