# **Presentation, Translations [1-8]**

#### **References:**

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3. Öniz A.S. and Cross T.M. (1981)"Physical Science Reader Series" Volume I, Middle East Technical University Ankara, Turkey.

4. Glendinning E. and Mantell H., (1983), "Write Ideas", Longman Group Limited

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6. Shreve N.R., Brink J.A.Jr. (Çeviri: Çataltaş A.İ.), 1985 Kimyasal Proses Endüstrileri I, İnkilap Kitabevi, İstanbul

7. McCabe W.L., Smith J.C. and Harriott P., 1985, Unit Operations of Chemical Engineering, Mc.GrawHill Book Company, NewYork.

8. Kimya Mühendisliği Ünit Operasyonları, 1981, McCabe-Smith'den Çeviren: Prof. Dr. Emir Gülbaran, İ.T.Ü.Mühendislik Mimarlık Fakültesi Yayınları,sayı 137, Matbaa Tek. Koll. ŞTİ, İstanbul

## Greeting

I would like to welcome you all to listen and participate the Session "POLYMER MATERIALS".

In the Session we are going to discuss "....", "..." and "...".

We have ..... speakers.

I would request from all speakers to conclude in .... min.

At the end of each talk, we would have .... Minutes for questions and discussions.

I invite our first speaker Dr. Peter Brown to talk about "POLYMER MATERIALS IN CONSTRUCTION " .

Professor Brown has been working at Nottingham University since 2016. He holds the B.Sc. and M.Sc. from the same department and a Ph.D. from the Chemical Engineering Department of Nottingham University, U.K. She has written over hundred articles on polymer materials.

## Length

Please Dr. Brown, be consistent with our time schedule. Thank you.

Ending a speech

I would like to thank Dr. Brown, fort his very nice presentation.

We have ... min for discussion.

Are there any questions to our speaker?

# questions/discussion

Thanks very much. Are there any questions?

Please summarize **the methods** and make a critical comparison of their strengths and weaknesses.

What are the errors of the computations in this work?

Have these **methods** a built-in ability to monitor **the error** in the solution?

Thank you very much.

Professor **Brown** is presently researching into **polymer materials**. Are there any questions?

Could you explain **this rule** to me?

Did you compare **the methods** for accuracy and stability through an example?

How **the other methods** can be adapted to this type of problem?

Thanks a lot. I am very impressed with this work.

Are there any questions?

Which methods are applied to **the same example** to show how they compare?

What does that "type A of polymer concrete" mean?

Ending a session

We discussed **"construction materials"**, **"polymer materials"**, **"polymer in concrete"** in this session.

I would like to thank to all speakers and to all participants once more for their very valuable studies and presentations.

They shared with us their important works.

I close here the session.

#### «Example 18-2

A continuous fractionating column is to be designed to separate 13600 Kg/h of a mixture of 40 percent benzene and 60 percent toluene into an overhead product containing 97 percent benzene and a bottom product containing 98 percent toluene. These percentages are by weight. A reflux ratio of 3.5 mol to 1 mol of product is to be used. The molal latent heats of benzene and toluene are 7360 and 7960 cal/g.mol, respectively. Benzene and toluene form an ideal system with a relative volatility of about 2.5; the equilibrium curve is shown in Fig. 18-16. The feed has a boiling point of 950C at a pressure of 1 atm.»[7-8]

### Örnek 19-4:

%40 benzen ve %60 lık touenden ibaret 13600 Kgr/saat'lik bir karışım, üst ürün olarak %97 benzen ve alt ürün olarak %98 toluen elde edecek şekilde devamlı bir destilasyon kolonunda ayrılmak isteniyor. Bu % ler ağırlıkçadır. Geri akma oranı 1 mol ürün için 3,5 moldür. Benzen ve Toluenin mollu gizli ısıları 7675 cal/gr.mol dür.

[7]McCabe W.L., Smith J.C. and Harriott P., 1985, Unit Operations of Chemical Engineering, McGraw- Hill Book Company, New York.

[8]Kimya Mühendisliği Ünit Operasyonları ,1981, McCabe – Smith 'den Çeviren: Prof. Dr. Emir Gülbaran, İ.T.Ü. Mühendislik Mimarlık Fakültesi Yayınları, Sayı 137,Matbaa Tek. Koll. ŞTİ, İstanbul (a) Calculate the moles of overhead product and bottom product per hour.

- (b) Determine the number of ideal plates and the positions of the feed plate
- i- If the feed is liquid and at its boiling point;

«....

- ii- If the feed is liquid and at 200C (specific heat = 0.44);
- iii- If the feed is a mixture of two-thirds vapour and one-third liquid.

(c) If steam at 1.36 atm. gauge is used for heating, how much steam is required per hour for each of the above three cases, neglecting heat losses and assuming the reflux is a saturated liquid?

(d) If cooling water enters the condenser at 26,70C and leaves at 65.50C, how much cooling water is required, in litter per minute? »[7-8]

(a) Kolonun tepesinden ve altından alınacak (saatte) mol miktarını bulun.

- (b) İdeal raf sayısını ve besleme rafının yerini bulun.
- i- Eğer karışım kaynama noktasında bir sıvı ise,
- ii- Eğer karışım 200C de bir sıvı ise (özgül ısısı 0,44)
- iii- Eğer karışımın 2/3 ü buhar, 1/3 ü sıvı ise

(c) Eğer basıncı 1,36 atm. (geyç) olan buhar ısıtmak için kullanılacaksa, yukardaki her üç halde saatte kullanılacak buhar miktarı nedir? (Isı kaybını ihmal edin, reflux'un doymuş sıvı olduğunu kabul edin).

(d) Eğer soğutma suyu kondensöre 26,70C de girer ve 65,60C da çıkarsa, ne kadar soğutma suyu gereklidir. (Dakikada litre olarak)»[7-8]

Complete the sentences with the words in the list. Use each word only once.

(depends conveyed exclamation plan quote completion emphasis source extending gratitude)

1. Use the pause. Silence is an excellent <u>exclamation</u> point. By slightly <u>extending</u> a pause, you can add <u>emphasis</u> to a key point in your presentation. All presenters pause naturally, but the best presenters <u>plan</u> their pauses for maximum impact!

2. Never directly copy or <u>quote</u> sentences from your sources. Ideas should be <u>conveyed</u> in your own words, and the <u>source</u> of this information should be cited and referenced.

3. I express my sincere **gratitude** to him for his constant support and valuable suggestions without which the successful **completion** of this seminar would not have been possible.

4. The number of slides <u>depends</u> upon the time that you take in giving seminar, so have one slide for each minute of that time.