

Learning Documentation

Catalysts and Reactor Applications Course

A. Google Meets

The screenshot shows a Google Meet interface. At the top, a red 'REC' button is on the left, and a status bar indicates 'DR MOHD LOKMAN IBRAHIM is presenting'. The main area displays a presentation slide with the following text:

CMT674
CATALYST CHARACTERIZATION
TECHNIQUE USING BET

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On the right side, there is a vertical list of participants. The top entry is 'You' with a red circle containing a white 'S'. Below it is a video thumbnail of 'DR MOHD LOKMAN IBRA...' showing a man speaking. At the bottom of the list, it says '61 others' with two small profile icons. The bottom of the screen features a dark toolbar with icons for mute, video, chat, hand raise, screen share, and a red hang-up button. On the far right of the toolbar, there are icons for help, a participant count of '64', chat, and a grid view icon.

B. Hand Out

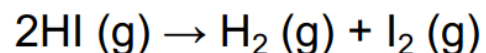
Application of XRD

- XRD is a non-destructive technique
- To identify crystalline phases and orientation
- To determine structural properties:
- Lattice parameters (10^{-4}\AA), strain, grain size, epitaxy, phase composition, preferred orientation (Laue) order-disorder transformation, thermal expansion
- To measure thickness of thin films and multi-layers
- To determine atomic arrangement
- Detection limits: $\sim 3\%$ in a two-phase mixture; can be $\sim 0.1\%$ with synchrotron radiation
- Spatial resolution: normally none

C. Exercise on Asynchronous Learning

Checkpoint 1.11

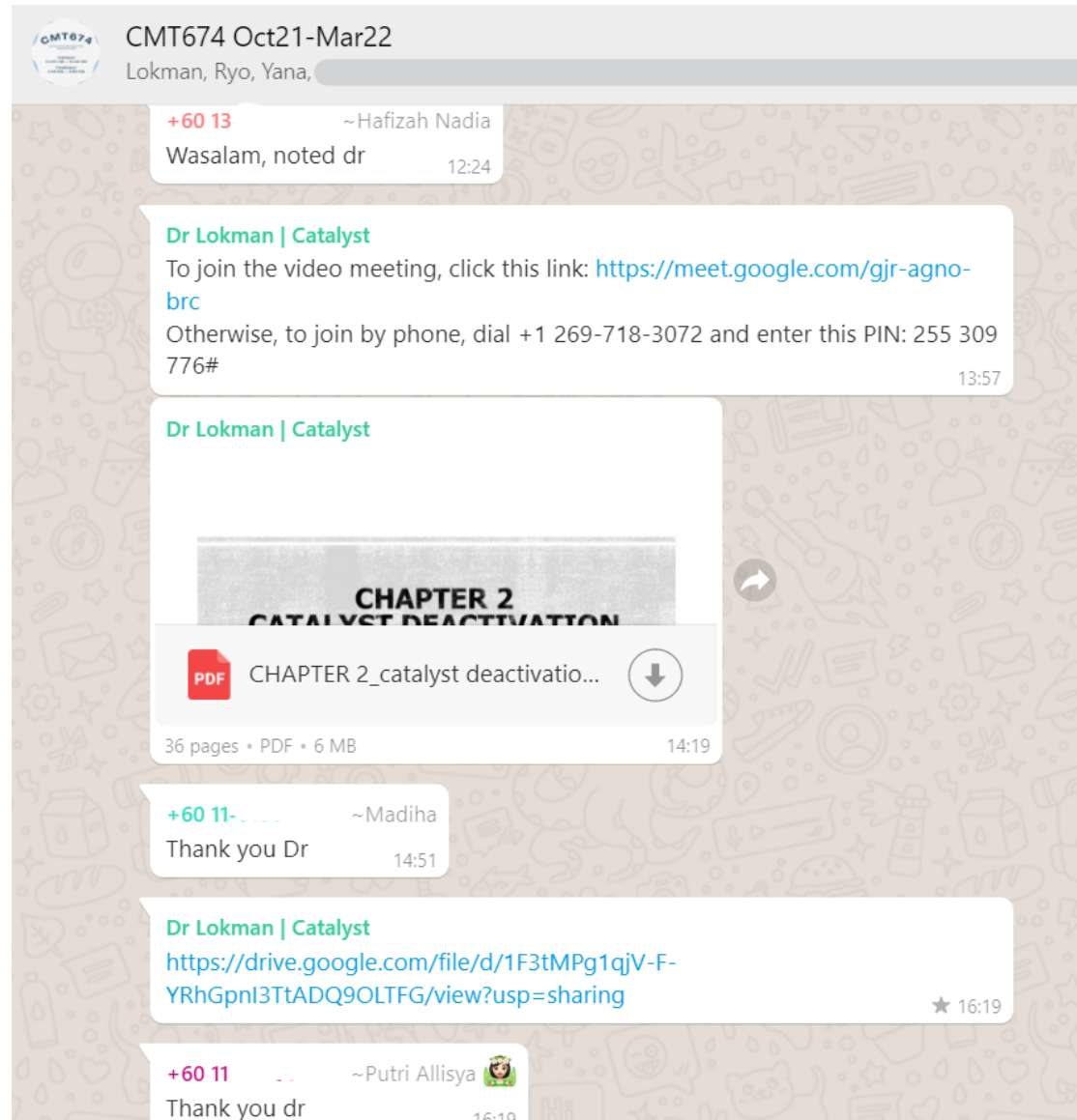
The decomposition of hydrogen iodide follows the equation;



The reaction is second order and has a rate constant of $1.6 \times 10^{-3} \text{ mol}^{-1} \text{ L s}^{-1}$ at 700°C . If the initial concentration of HI in a container is $3.4 \times 10^{-2} \text{ M}$, how long will it take for the concentration to be reduced to $8.0 \times 10^{-4} \text{ M}$?

($1.3 \times 10^4 \text{ min}$)

D. Whatsapp Group





CMT674 Oct21-Mar22

Lokman, Putri, Ryo, Yana,

13:00

12/9/2021

+60 13-879 [redacted] ~Izzaidah Riman

Assalamualaikum

Test CMT674

Date: 9december2021

Time: 2.00-3.00 pm

Attn: answer all the questions using your own paper

Submission: Please submit pdf answer sheet (use CamScanner) personally to my Whatsapp before 3.05pm

late submission will be tagged as 'late submission'

★ 13:01

this is not open book test.. so please do not refer to you notes!

13:01

we will know you cheat

13:01

+60 13- [redacted] ~Izzaidah Riman

Forwarded

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TEST



TEST_CMT674_UiTM SHAH ALA...



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13:01