Presenting Science

Oral presentations - Part I

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Where innovation starts

Conferences

- **Why do you go ?**
  - to learn about my field
  - to share and discuss my work
  - to meet the people in my field
  - ……..

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Conferences

- **What is your experience ?**

  while I heard some excellent lectures,

  and had some really useful discussions,

  - **many presentations were difficult to follow**
  - **some were poorly presented, or boring**
  - **I didn't have the background to appreciate the relevance of the work**
  - **I was overwhelmed by the amount of information in the poster session**

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Conferences

Why don't we get more out of a conference, a department seminar, a graduation talk, etc.?

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General Principle:

My Message

- clear
- relevant
- in context
- repeated
- visual

The Audience

- limited attention span
- limited background
- easily distracted
- likes visual information
- overloaded with info

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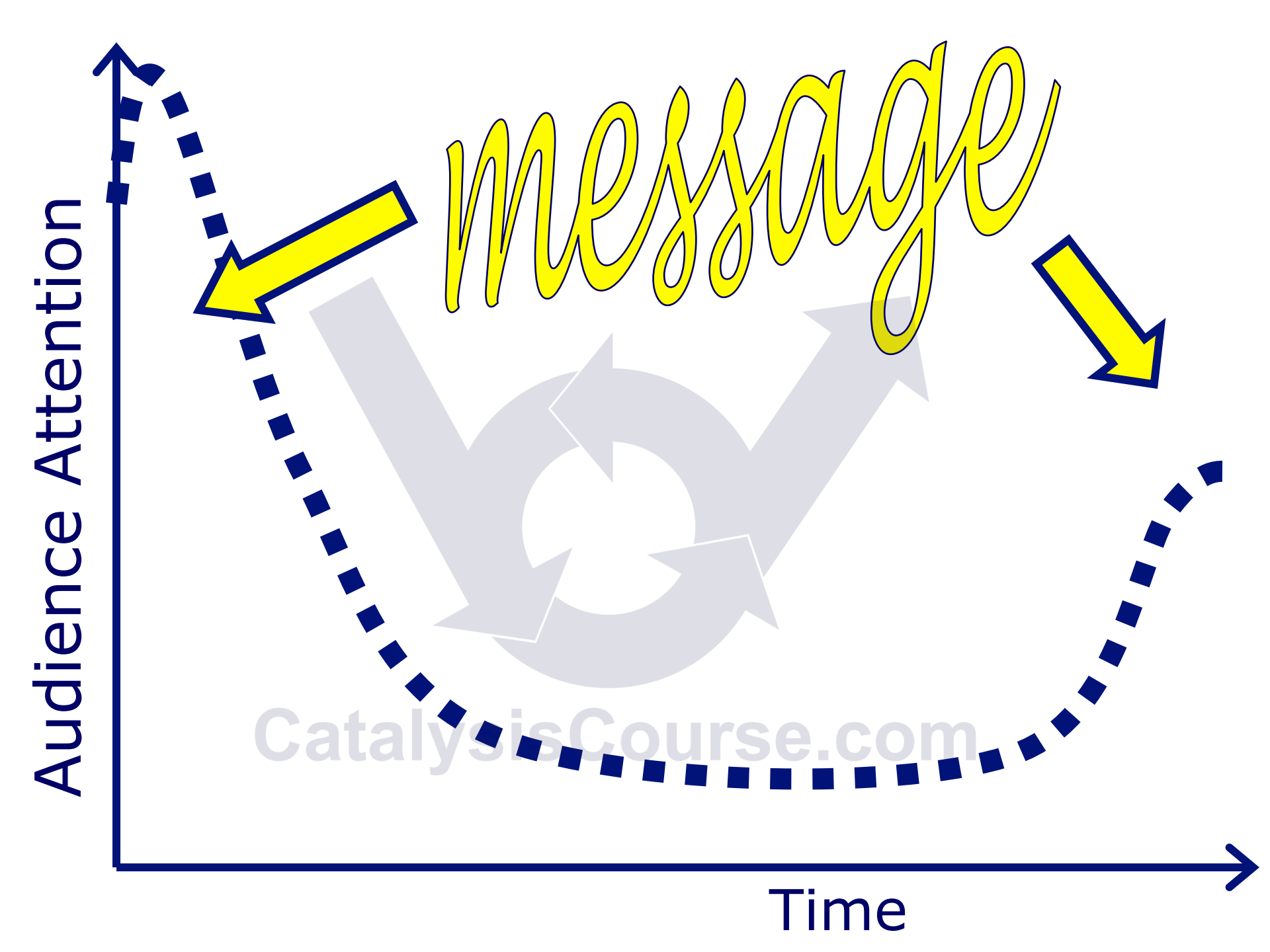
message
Audience Attention
Time
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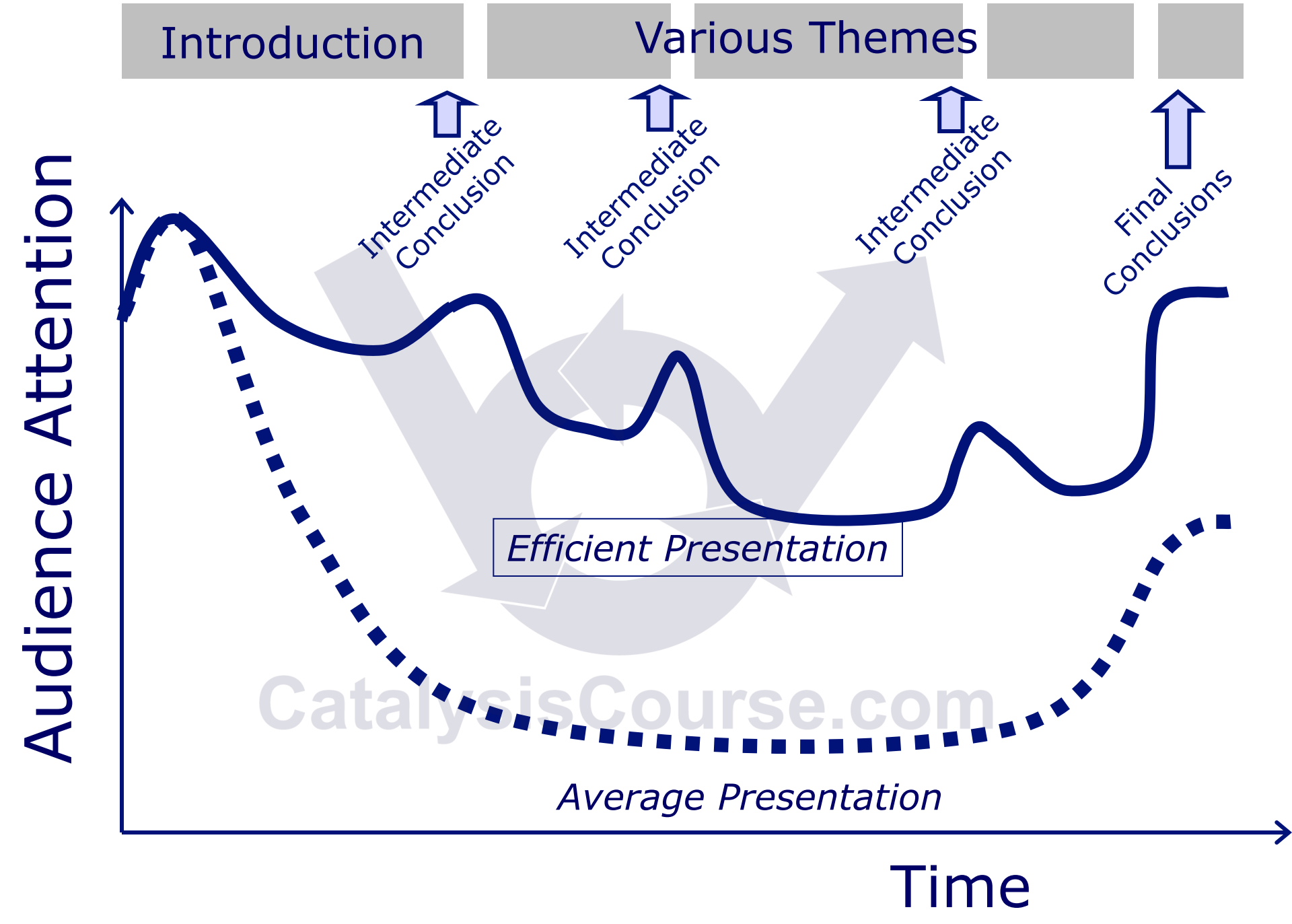
Introduction
Various Themes
Intermediate Conclusion
Intermediate Conclusion
Intermediate Conclusion
Final Conclusions
Audience Attention
Efficient Presentation
Average Presentation
Time
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Components of Presentation

- Spoken words
- Visual Aids
- Non-verbal modifyers
  - intonation, sound,
  - body language
- Audience response
  - questions, interruptions
  - non-verbal messages
- Environment

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Mistakes Speakers Make

the speaker overestimates the audience

the audience knows a lot less about your subject than your supervisor does …

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Mistakes Speakers Make

lack of clear structure

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The Best Outline for a Talk is *not:*

- ~~Introduction~~
- ~~Experimental~~
- ~~Results~~
- ~~Discussion~~
- ~~Conclusion~~

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The Best Outline for a Talk:

Introduction

Main Part

Conclusion

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Mistakes Speakers Make

Abuse of Powerpoint

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Mistakes Speakers Make

inefficient figures

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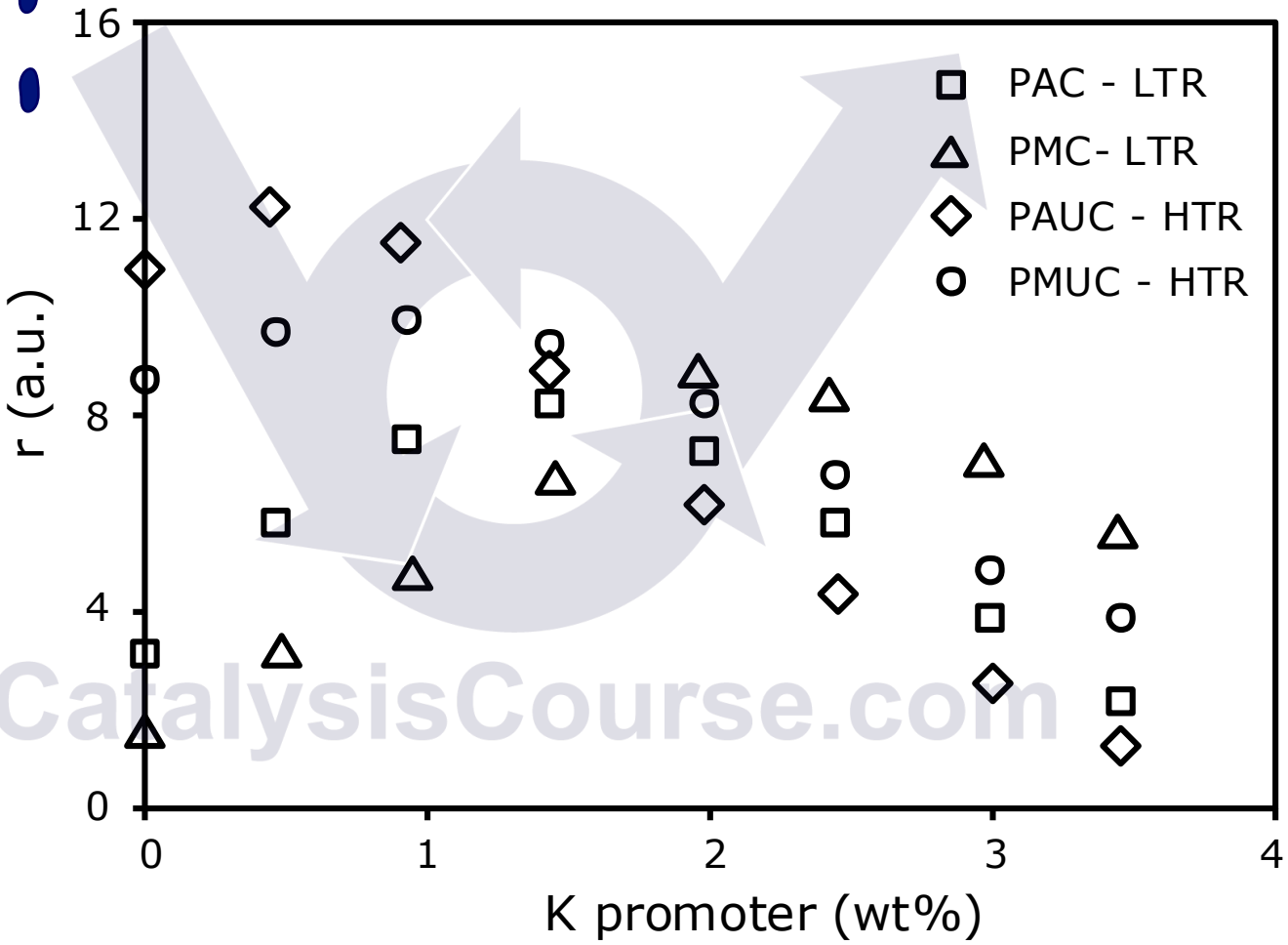
Inefficient figures

Poor:



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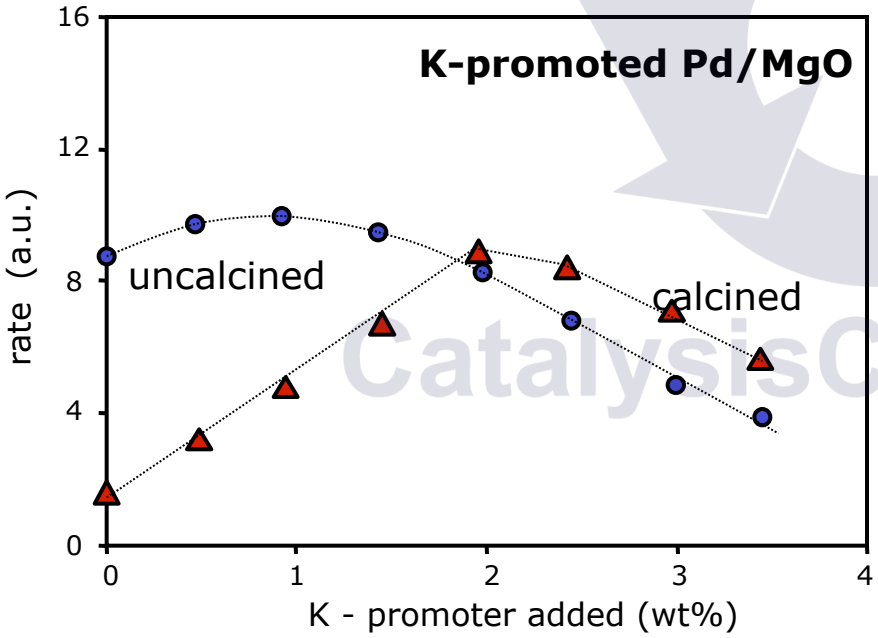
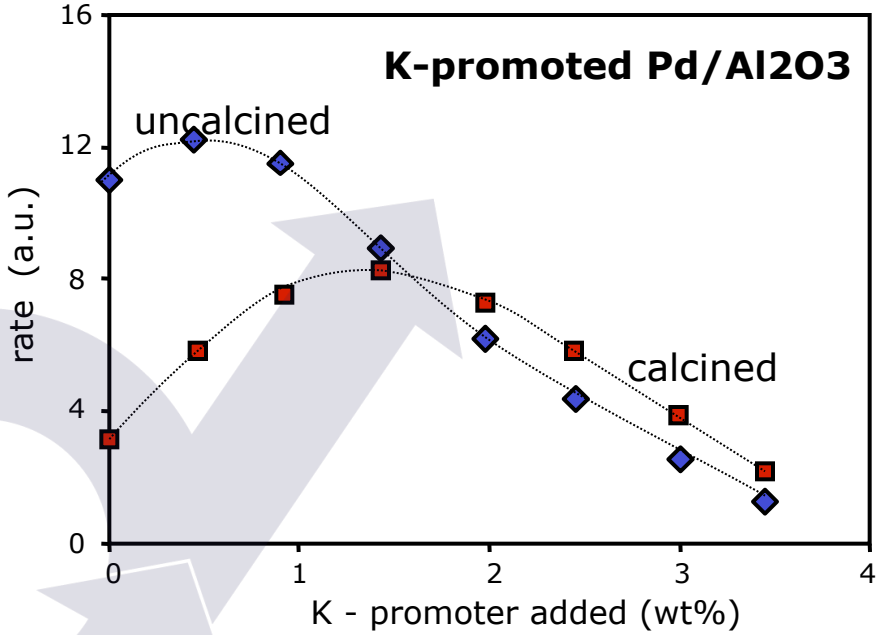
Inefficient figures

Better:





Understandable
Labels directly
on the curves

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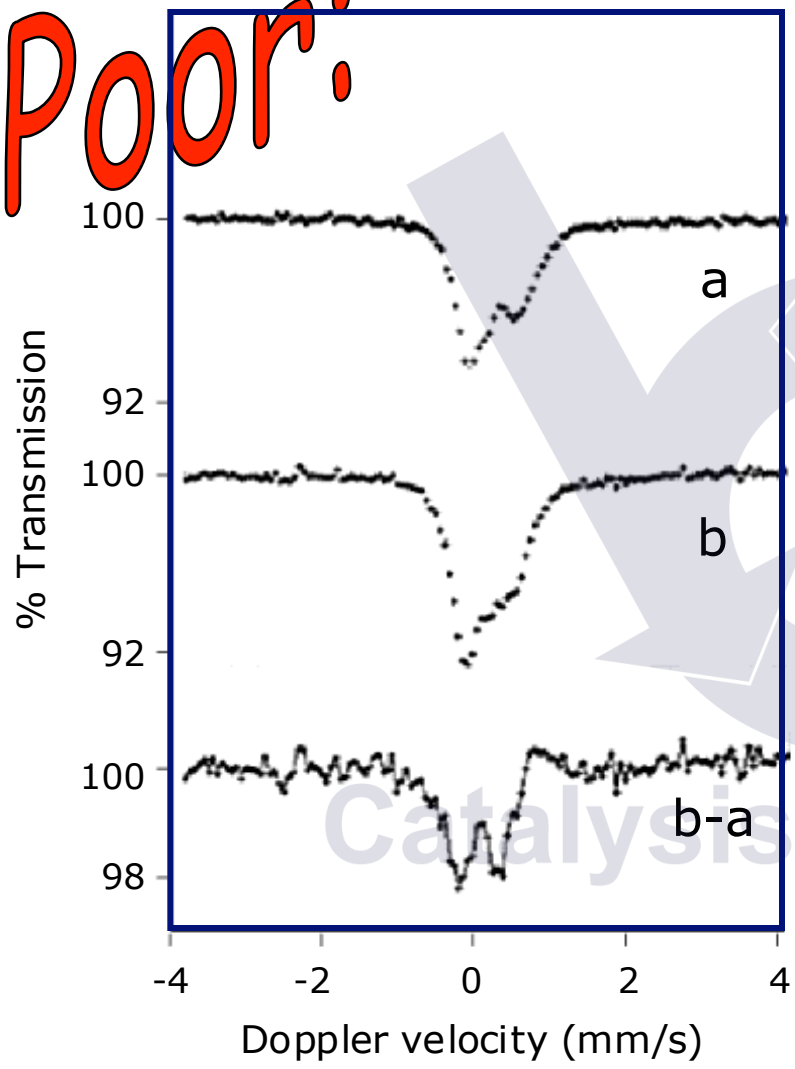
Inefficient figures

Poor:



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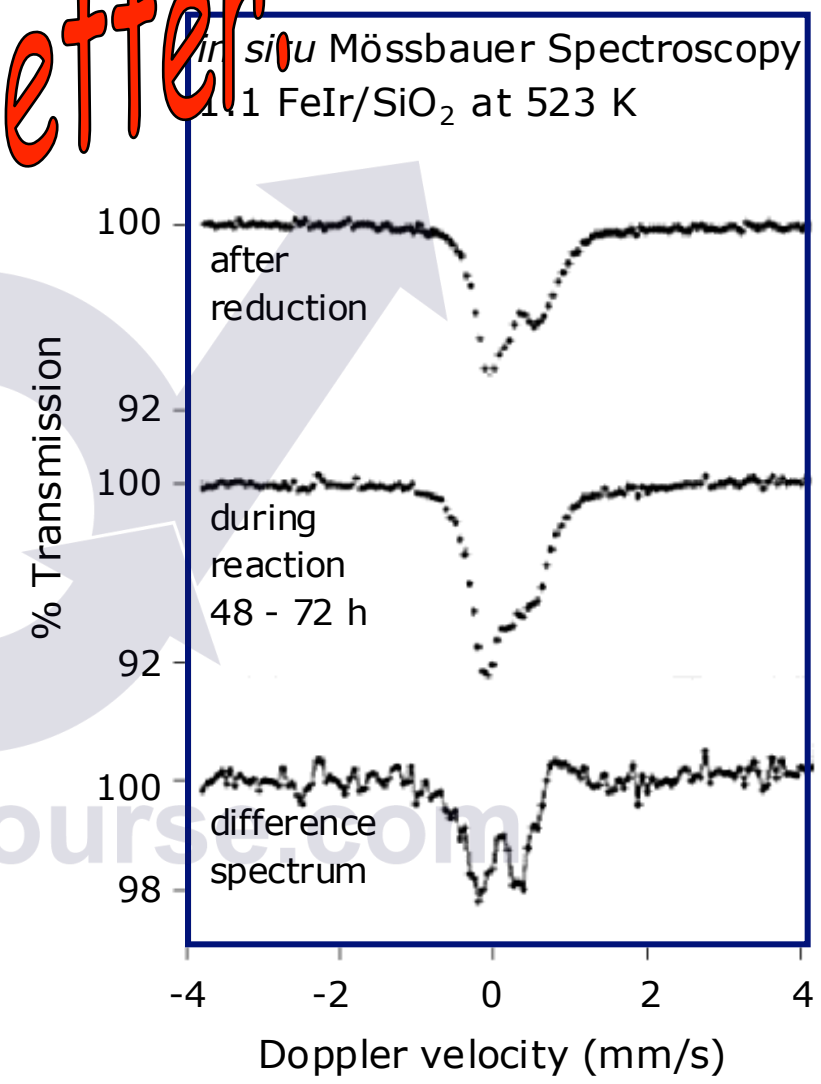

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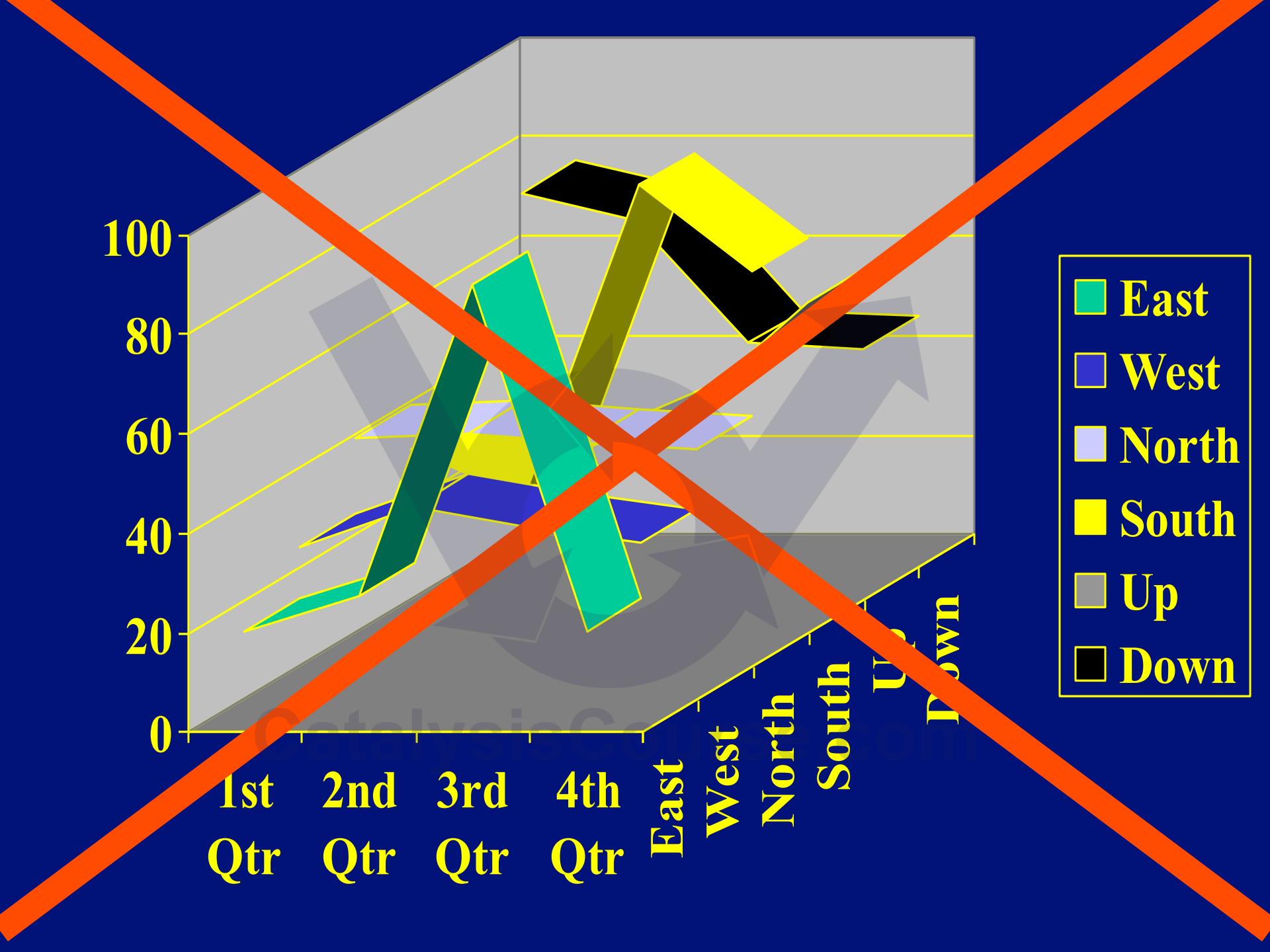
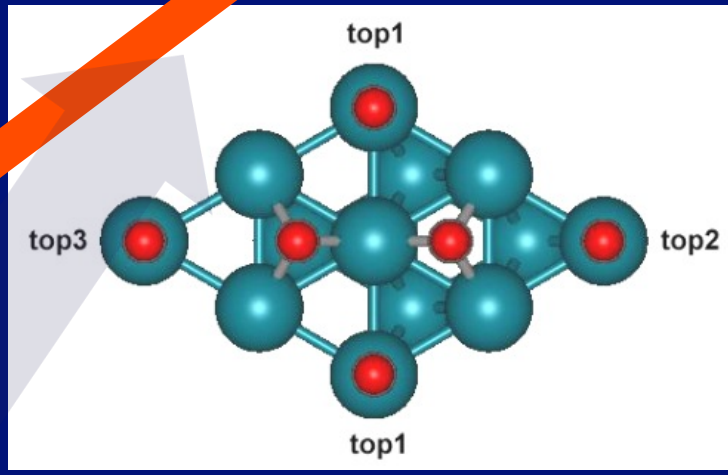

100
80
60
40
20
0
1st Qtr
2nd Qtr
3rd Qtr
4th Qtr
East
West
North
South
Up
Down
East
West
North
South
Up
Down

Equilibrium geometry and orbital occupation for several nCO/Rh_{13}(9,4) systems (n=1, 2, 6); zc and dco are the Rh-C and the C-O distances in angstrom, n(5σ) and n(2π) are the number of electrons in the 5σ and 2π* orbitals of CO, respectively.

	zc(Å)	dco(Å)	n(5σ)	n(2π)
CO/Rh_{13}(9,4)				
Top-center	1.842	1.159	1.59	0.68
Top 1	1.825	1.161	1.57	0.65
Top 2	1.824	1.160	1.58	0.66
Top 3	1.814	1.161	1.65	0.74
Bridge	1.465	1.178	1.22	0.87
hcp	1.330	1.192	1.22	1.05
fcc	1.306	1.191	1.23	1.03
2CO/Rh_{13}(9,4)				
hcp	1.352	1.188	1.35	0.94
fcc	1.350	1.186	1.35	0.94
6CO/Rh_{13}(9,4)				
Top 1	1.843	1.153	1.60	0.60
Top 2	1.871	1.155	1.62	0.59
Top 3	1.825	1.155	1.59	0.57
hcp	1.339	1.188	1.39	0.91
fcc	1.339	1.188	1.39	0.91



Avoid Tables !!!

Mistakes Speakers Make

Language:

- long, complicated sentences
- jargon, abbreviations
- report language

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Mistakes Speakers Make

Speech:

- monotonous
- little variation in ‘speed’
- no emphasis
- too fast
- towards screen,
  away from audience

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But …. how then?

See the next video:
In ten steps to an excellent presentation

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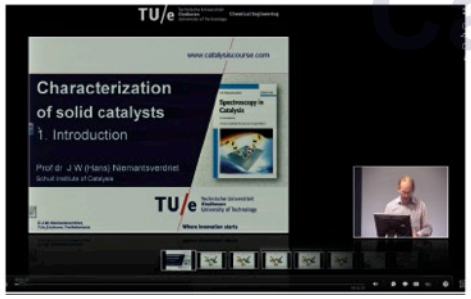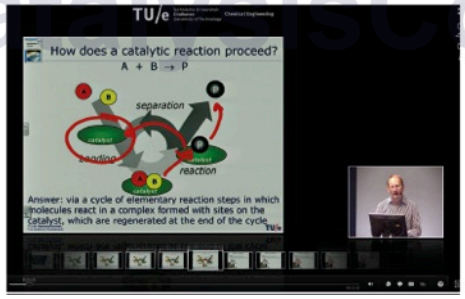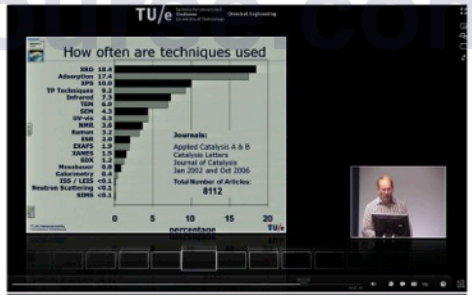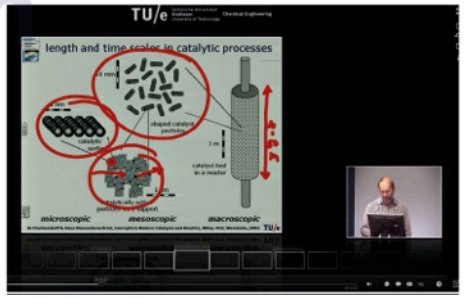
*also available on https://ees.elsevier.com/jcat/