

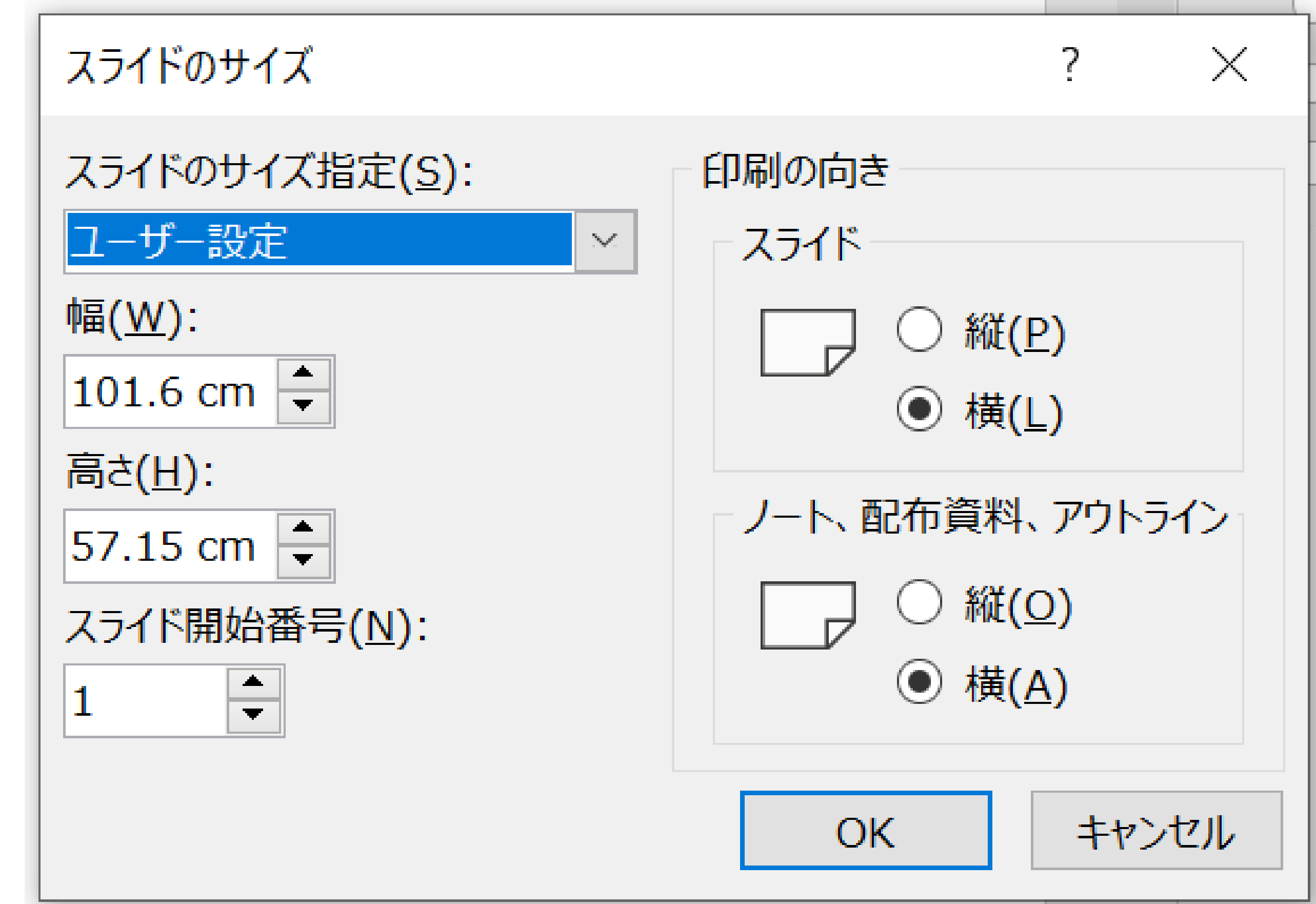
ポスター作成について / About Poster

■要件

- ①サイズ：101.6cm x 57.15cm（ワイド画面のデフォルトの3倍）
- ②枚数：1枚
- ※2ページ以降は「例」です
- ※Zoomで画面共有する際に拡大しないこと

■Specification

1. Size: 101.6cm x 57.15cm / Aspect ratio(16:9) (default setting) x3
 2. Page: 1
- ※ "Samples" from page 2
 - ※ Share as it is (presenter should not zoom in)



<謝辞>

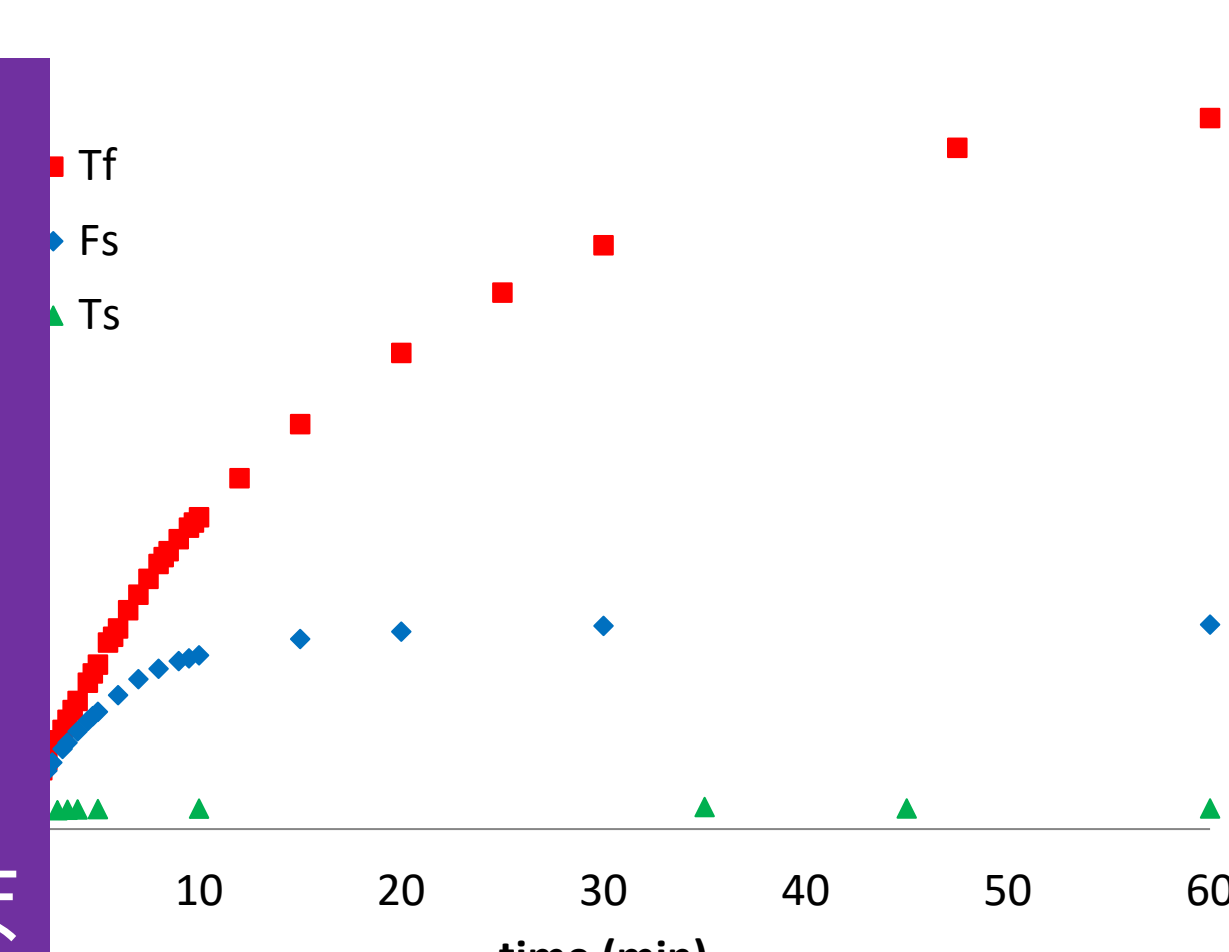
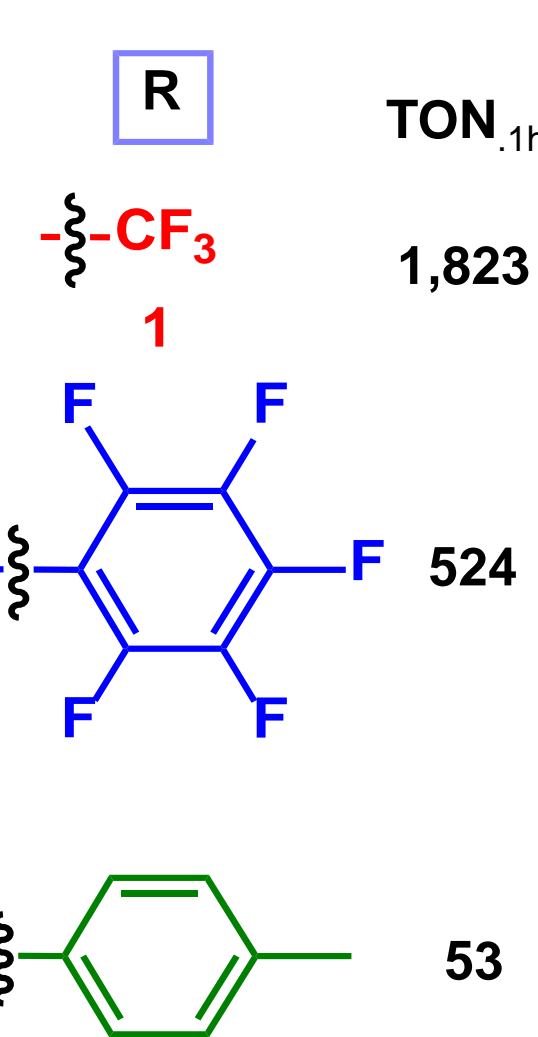
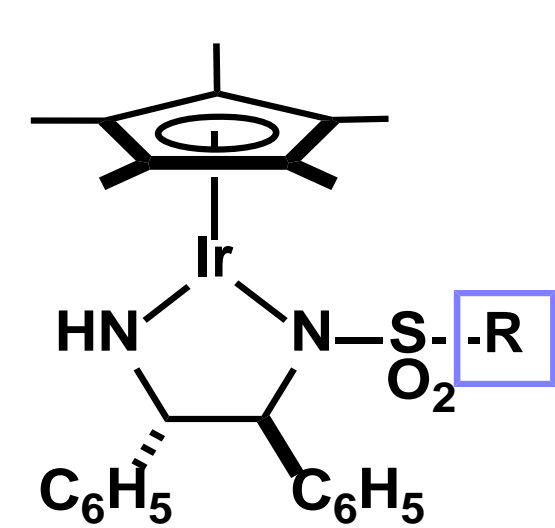
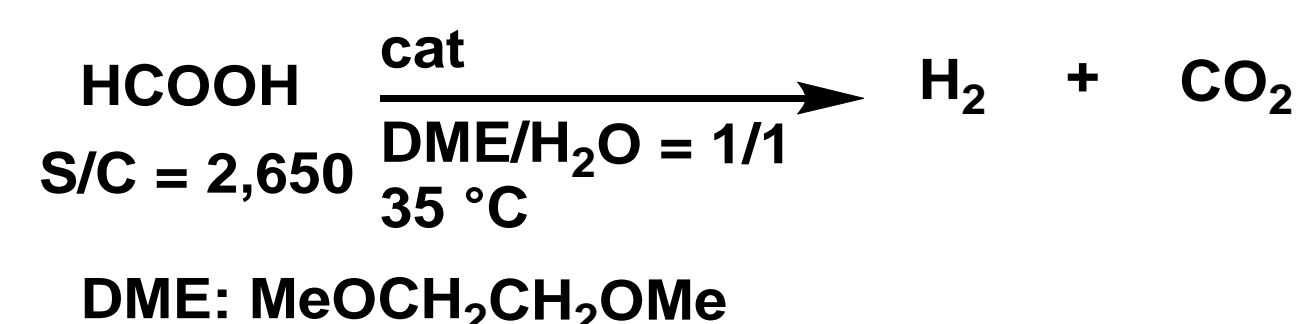
このポスター（発表資料）のサンプルは、第11回CSJ化学フェスタ2021のものを流用させていただいています。

○吉田 実祈¹, 中村 仁美¹, 松並 明日香², 桑田 繁樹¹, 榎木 啓人¹
¹東京工業大学物質理工学院 ²青山学院大学理工学部 (40pt)

bold 66pt)

背景 (48pt)

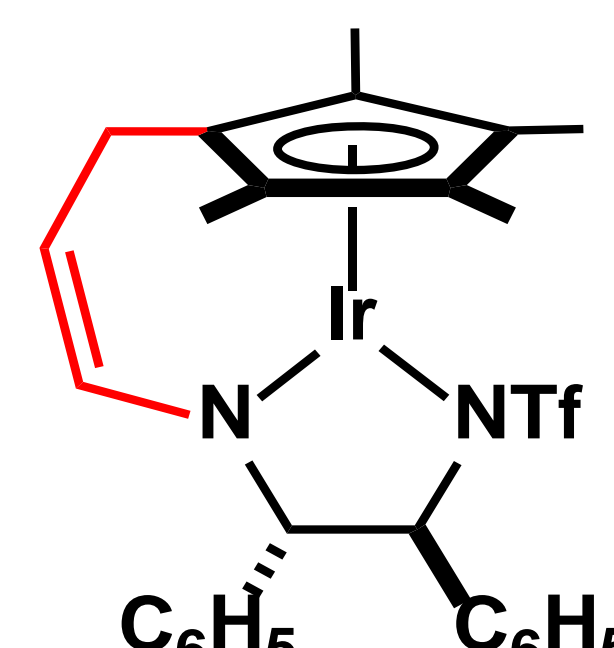
○協奏機能触媒によるギ酸脱水素化反応 (32pt)



A. Matsunami, Y. Kayaki, T. Ikariya, *Chem. Eur. J.* 2015, 21, 13513.

This work

New dehydrogenation catalyst

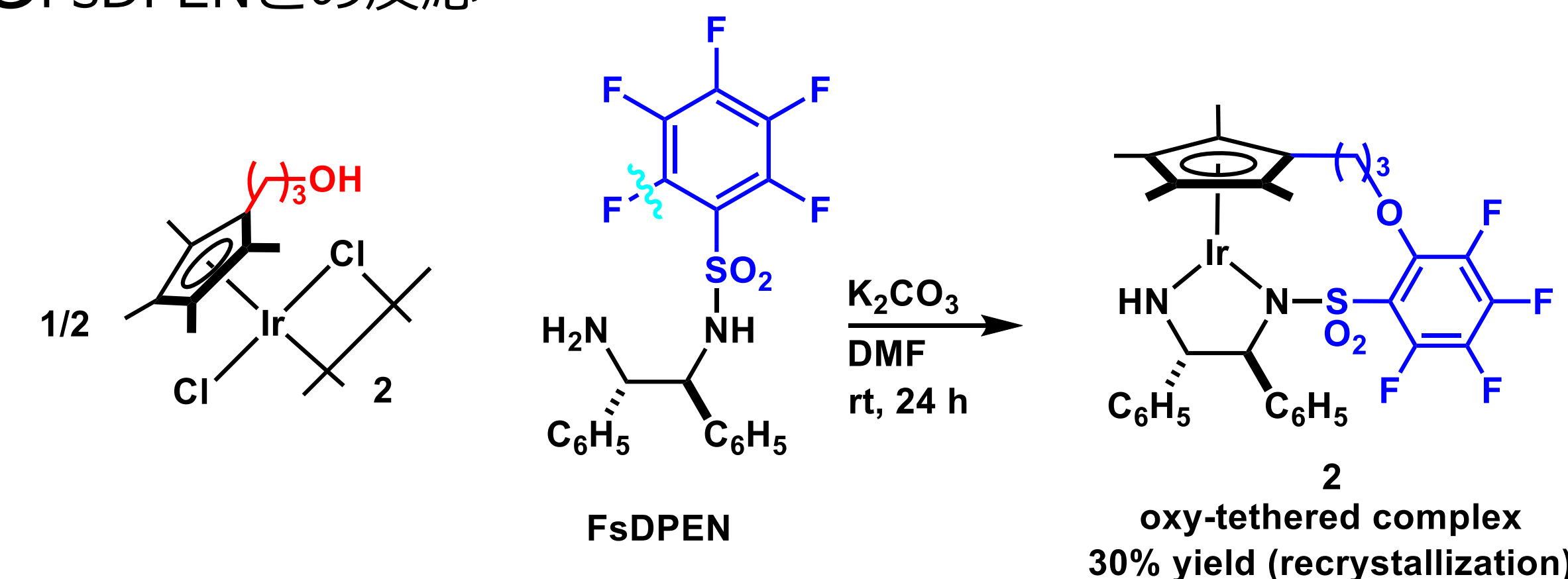


- Concise synthesis
- Efficient H₂ evolution from formic acid
- Robustness

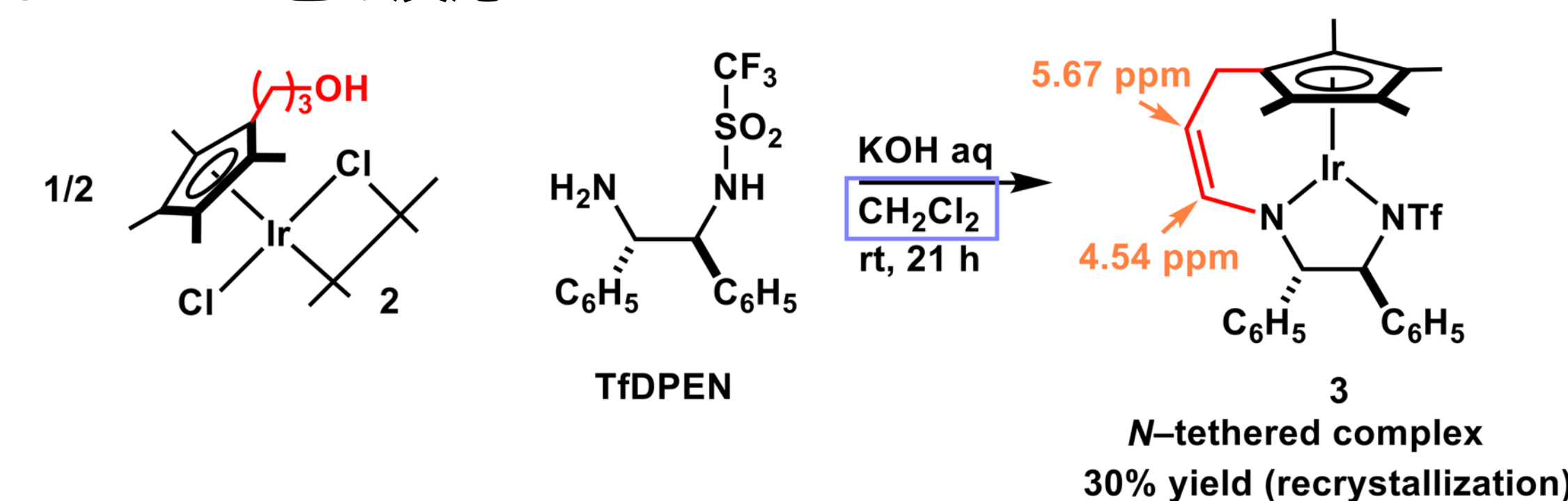
(24pt)

テザー型錯体の合成

OFsDPENとの反応



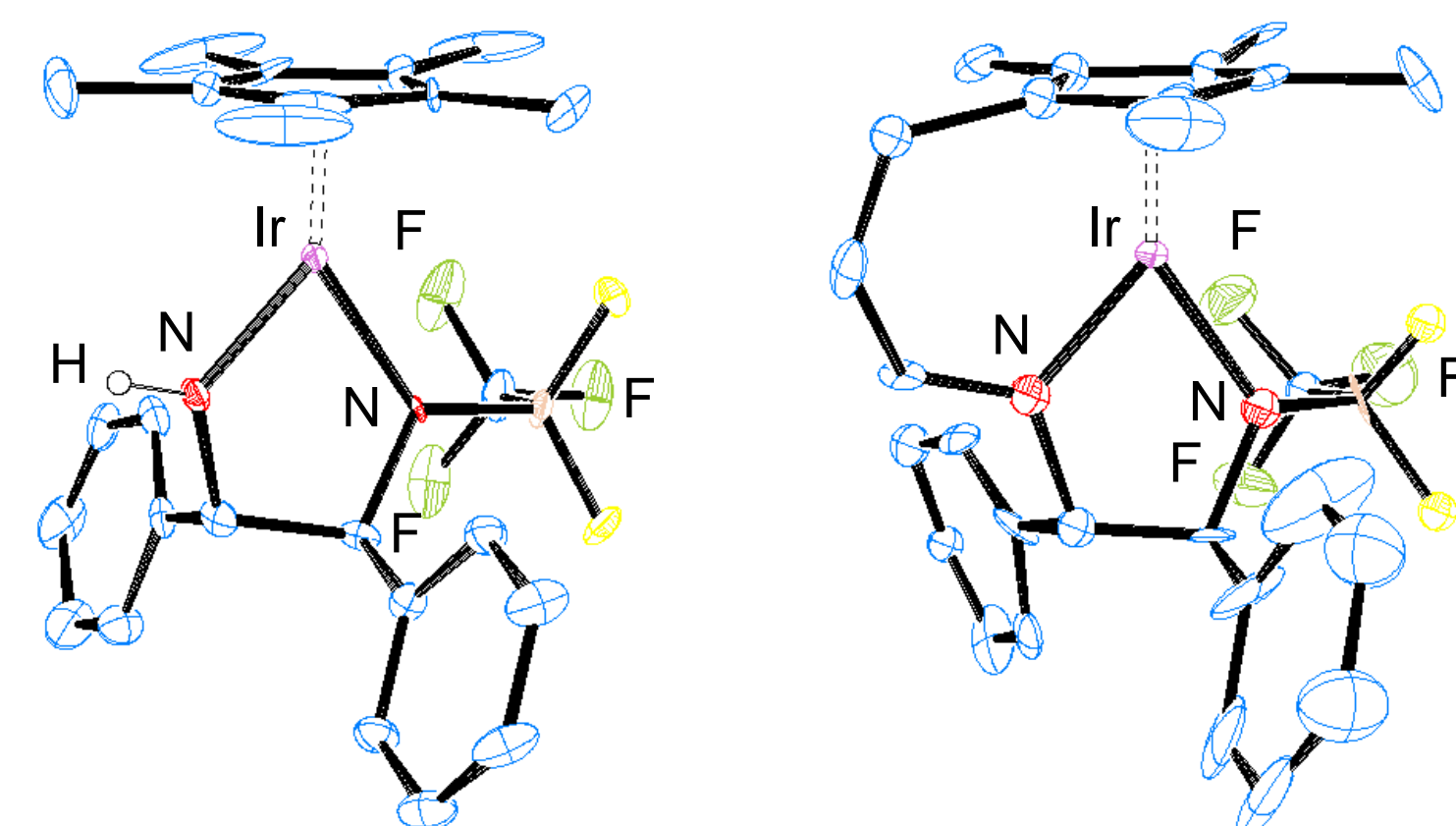
OTfDPENとの反応



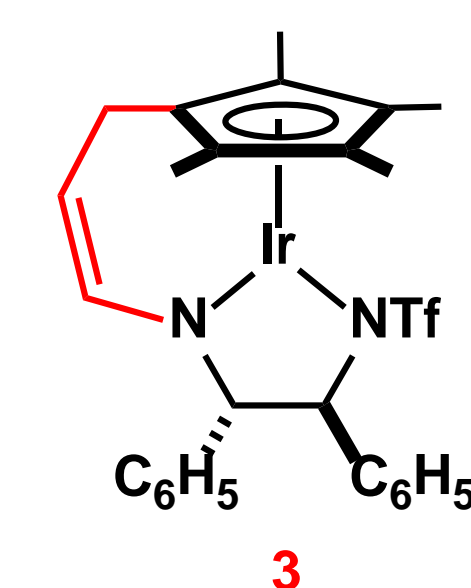
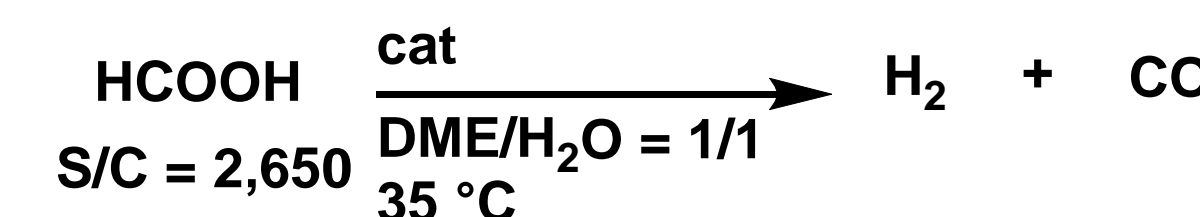
「ファイル」-「ページ設定」でスライドのサイズ指定を「ユーザ設定」にして幅101.6 cm、高さ57.15 cmに設定。図中のフォントサイズは目安。18-20pt以上が望ましい。

X線結晶構造

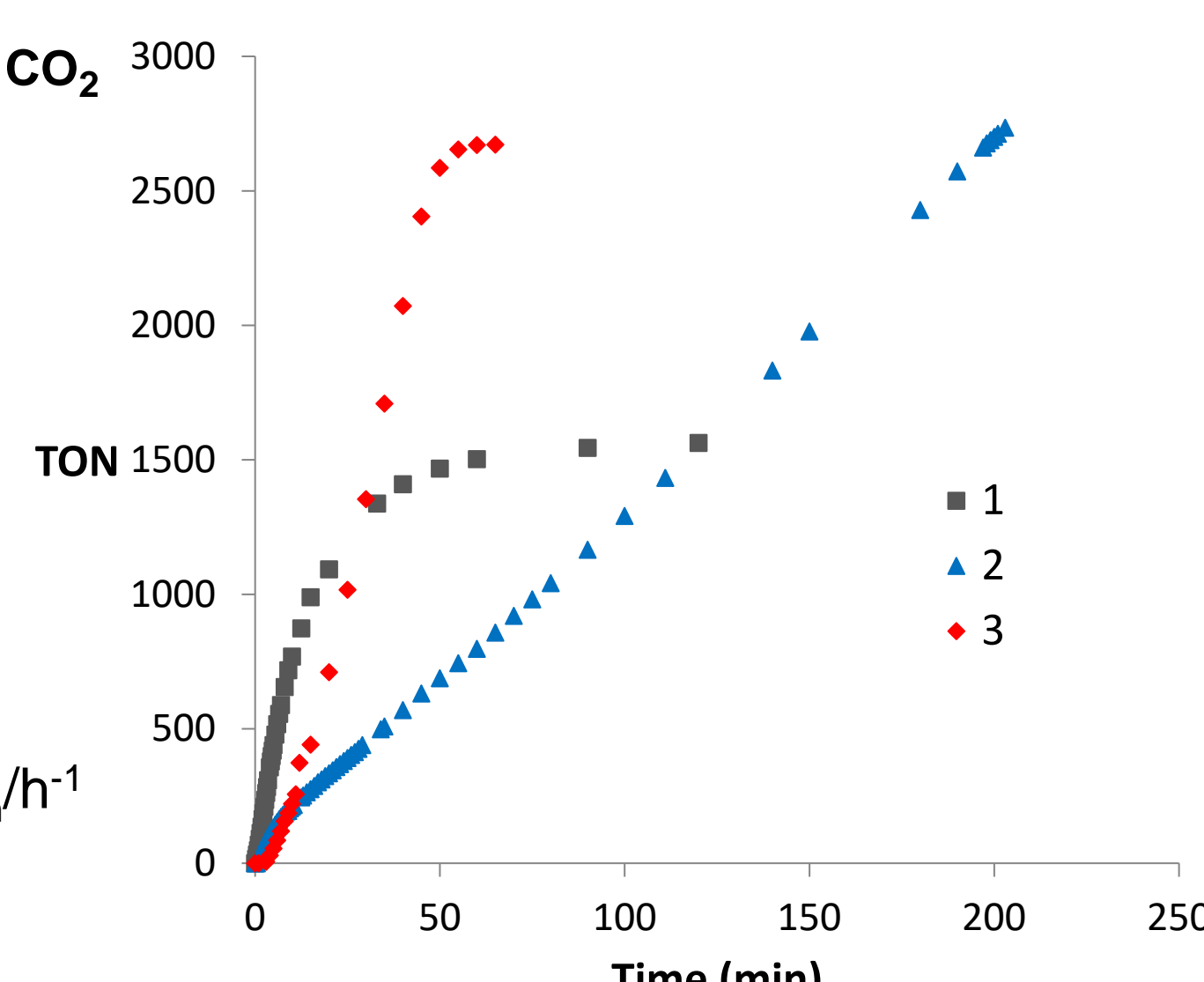
○錯体1と3の比較



触媒的脱水素化反応

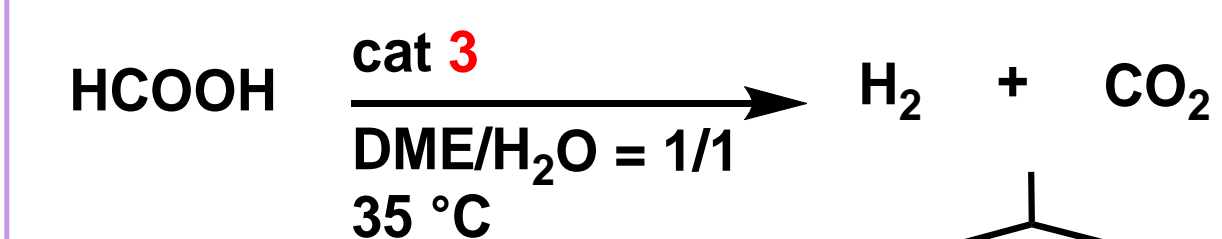


TON_{90 min} 2,650
 TOF_{5 min}/h⁻¹ 663

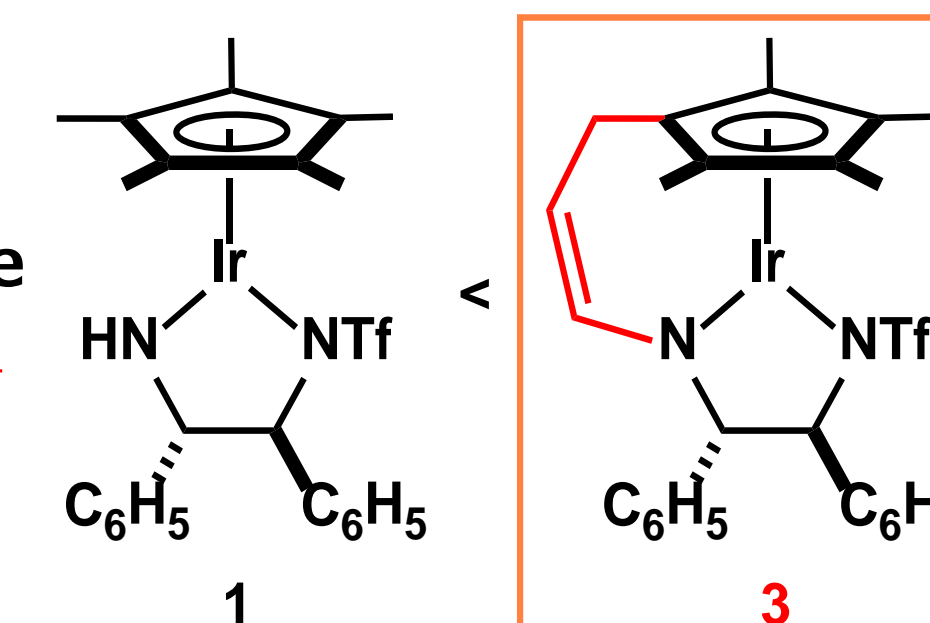


まとめ

○高効率な水素発生



- High activity at ambient temperature
TOF up to 5,000 h⁻¹
- Long-term stability
TON above 80,000



謝辞

This work was supported by JSPS KAKENHI Grant Numbers JPxxxxxxx.

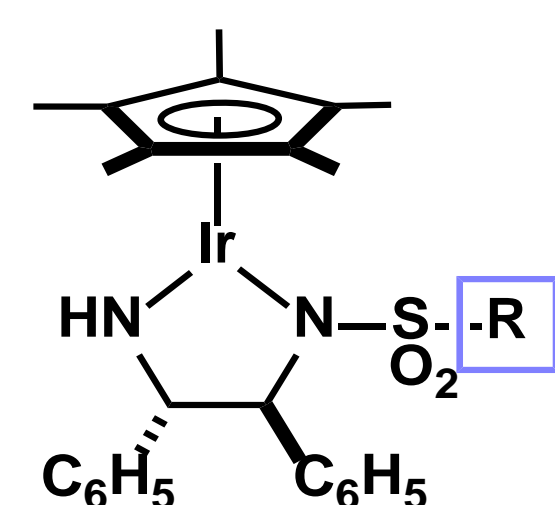
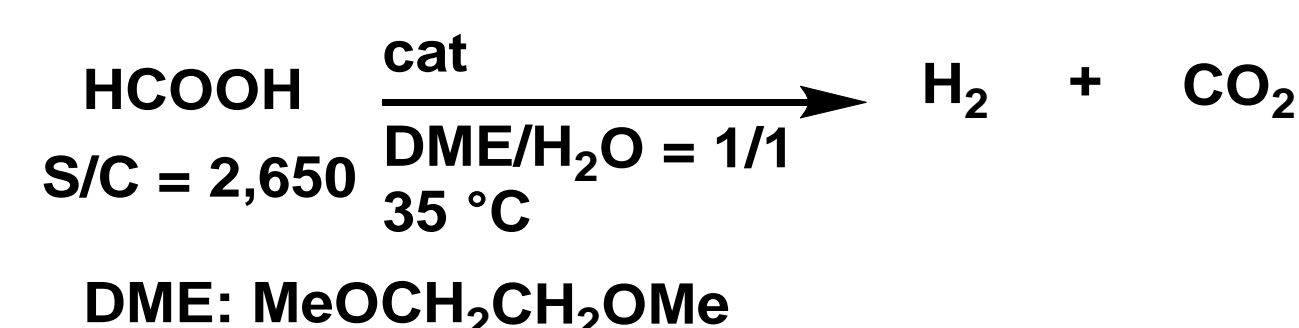
○Minori Yoshida,¹ Hitomi Nakamura,¹ Asuka Matsunami,² Shigeki Kuwata,¹ Yoshihito Kayaki¹ (40pt)

¹School of Materials and Chemical Technology Tokyo Institute of Technology, ²College of Science and Engineering, Aoyama Gakuin University

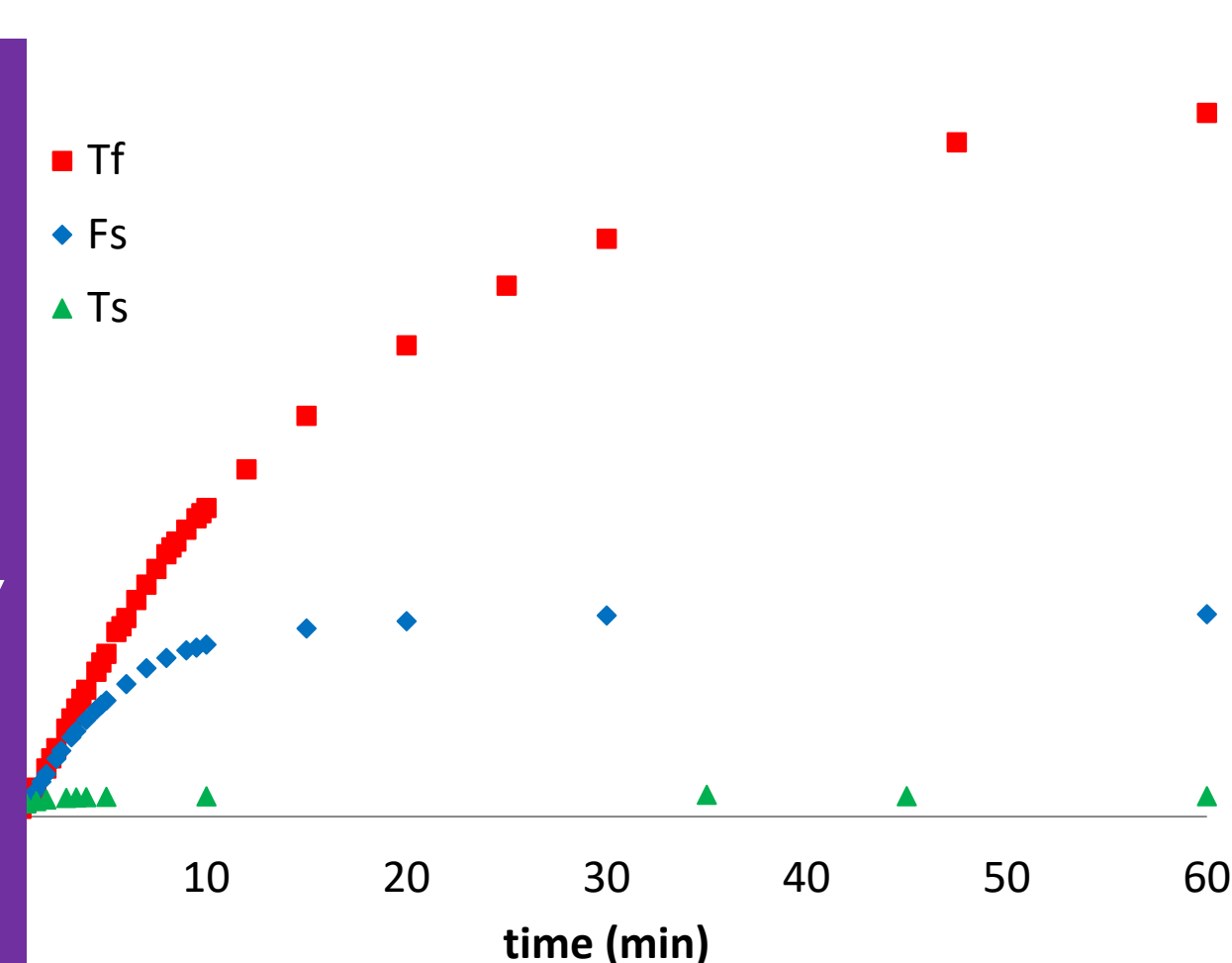
bold 66pt)

Backgrounds

○Dehydrogenation of formic acid with bifunctional catalysts



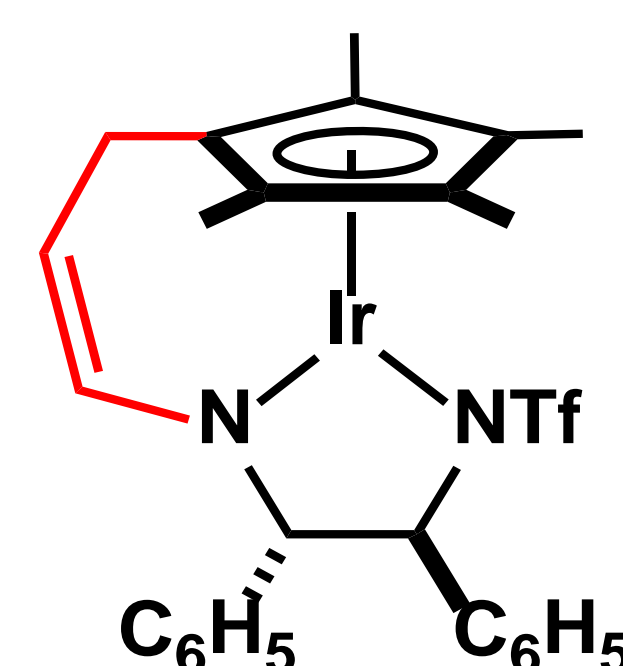
R	TON _{1h}
	1,823
	524
	53



A. Matsunami, Y. Kayaki, T. Ikariya, *Chem. Eur. J.* **2015**, *21*, 13513.

This work

New dehydrogenation catalyst

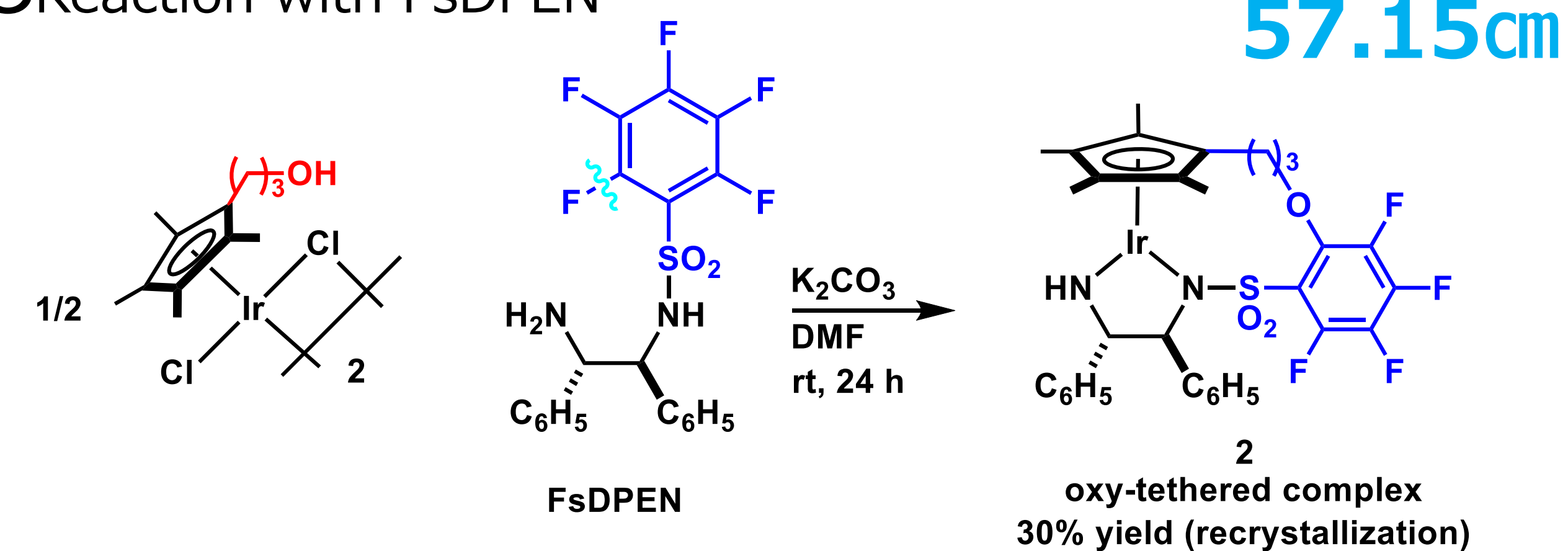


- Concise synthesis
- Efficient H₂ evolution from formic acid
- Robustness

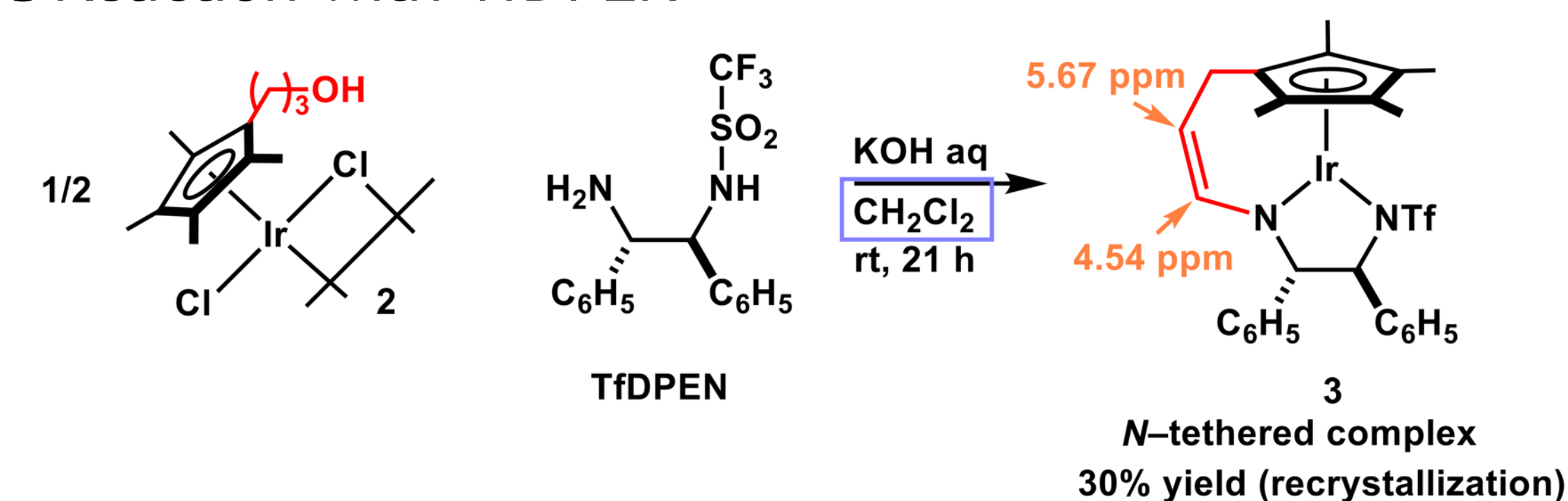
(24pt)

Synthesis of tethered complexes

○Reaction with FsDPEN



○Reaction with TfDPEN

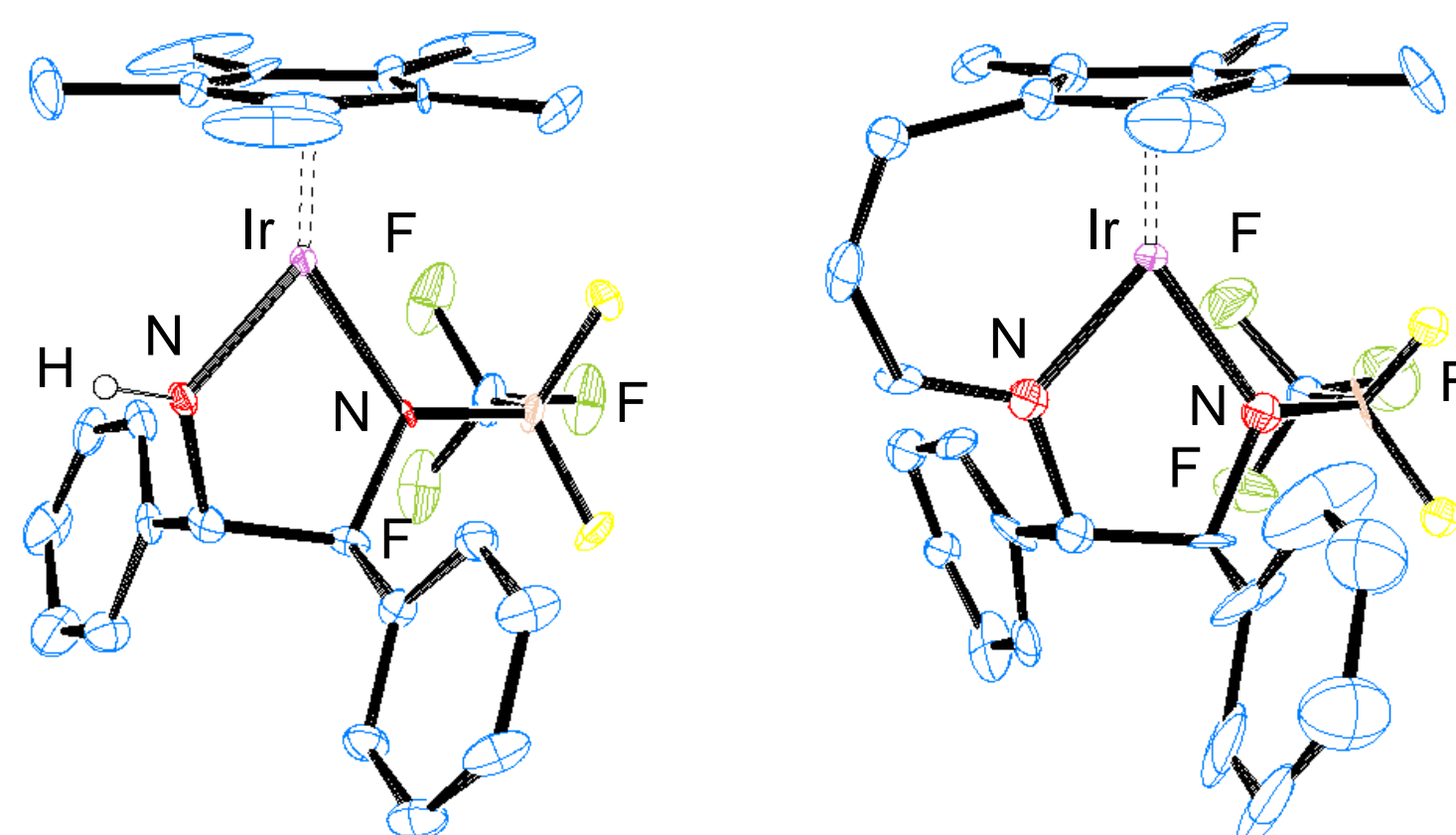


Please set the page size to "user setting" with 101.6 x 57.15 cm in "File" - "Page Setting"

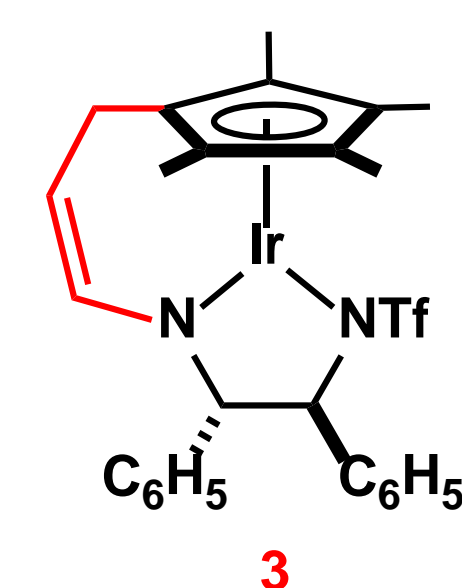
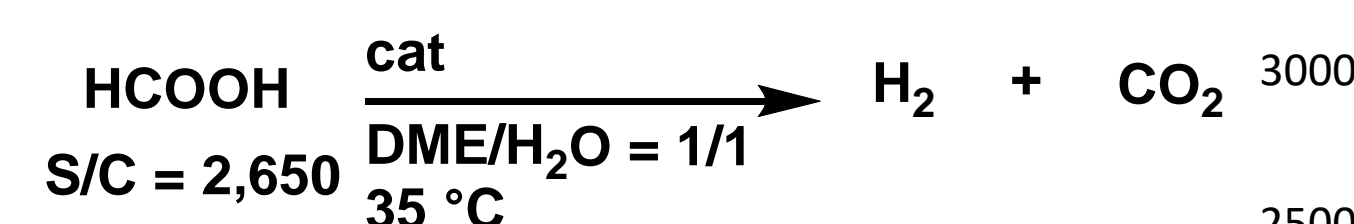
The font size should be 18-20pt or larger.

X-ray structures

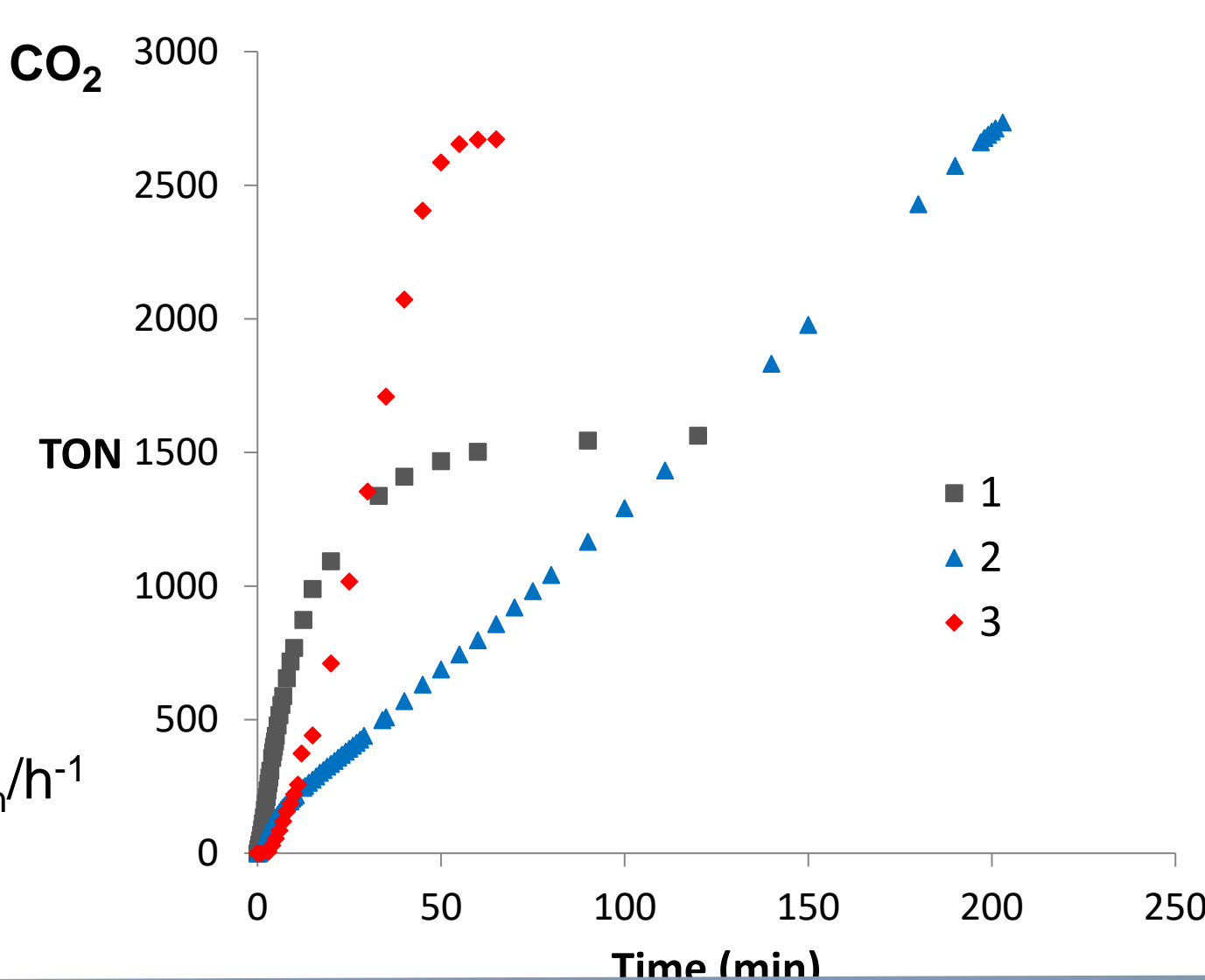
○Comparison of **1** and **3**



Catalytic H₂ evolution

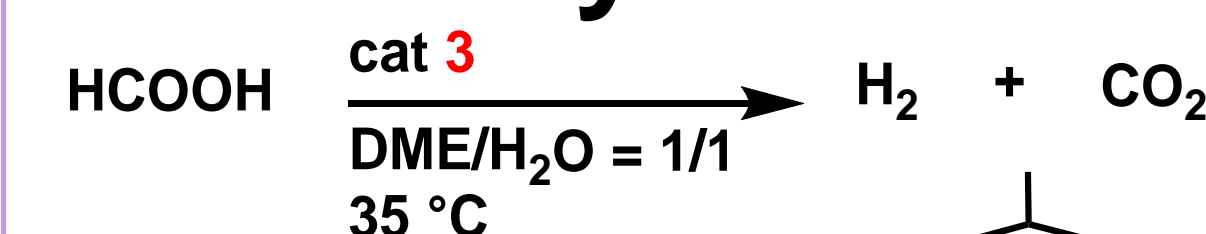


TON_{90 min} 2,650
TOF_{5 min/h⁻¹} 663

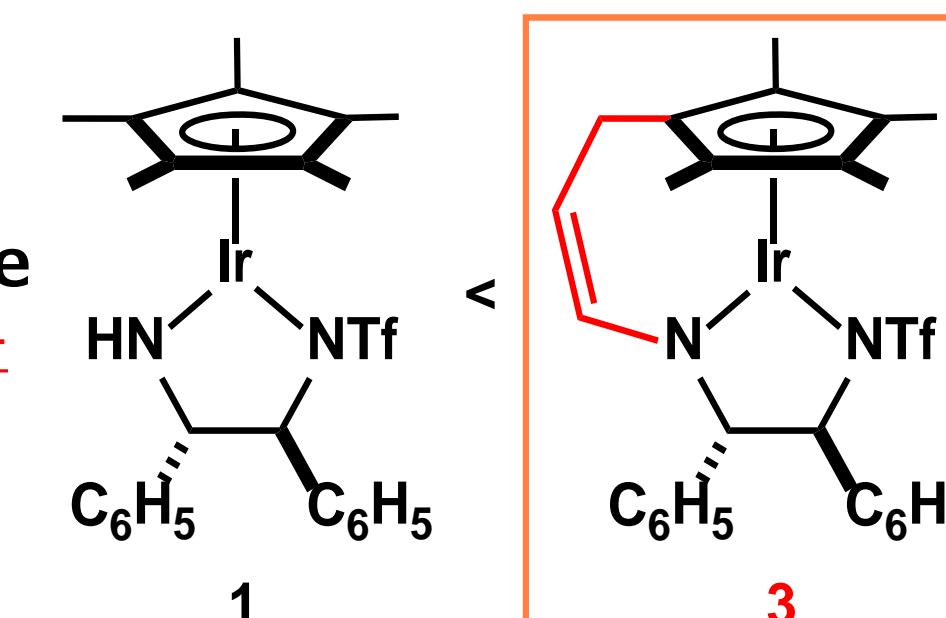


Summary

○Efficient H₂ evolution



- High activity at ambient temperature
TOF up to 5,000 h⁻¹
- Long-term stability
TON above 80,000



Acknowledgments

This work was supported by JSPS KAKENHI Grant Numbers JPxxxxxx.