

RSC Applied Interfaces

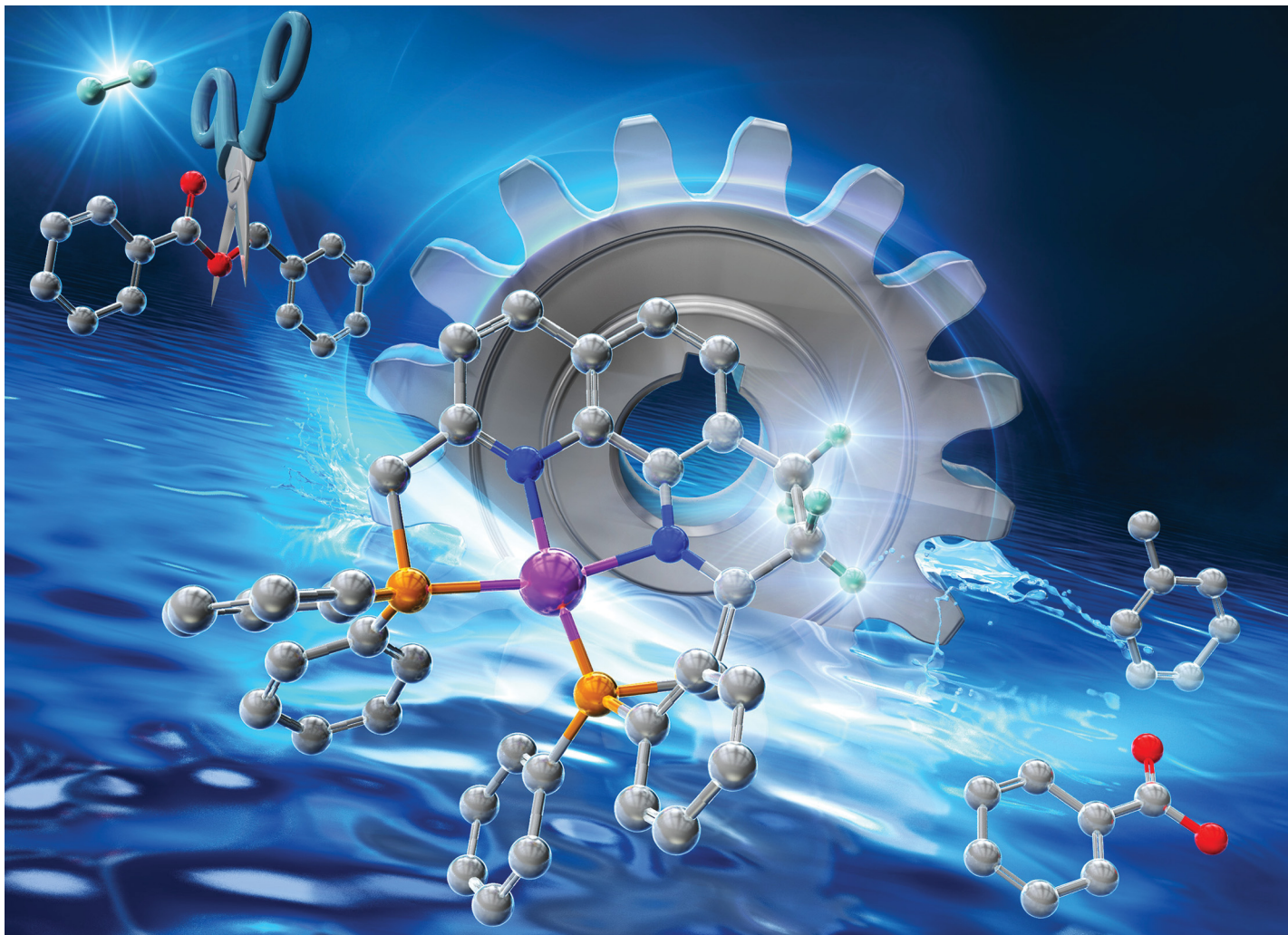
GOLD
OPEN
ACCESS

**Interfacial and surface research
with an applied focus**

Interdisciplinary and open access

rsc.li/RSCApplInter

**Fundamental questions
Elemental answers**

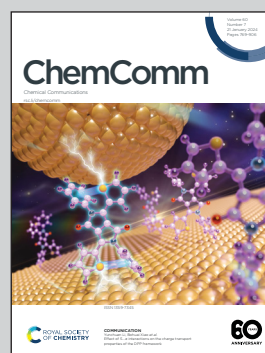


Showcasing research from Professor Nakajima's laboratory,
School of Materials and Chemical Technology,
Tokyo Institute of Technology, Tokyo, Japan.

Ester hydrogenolysis *via* β -C-O bond cleavage catalysed
by a phenanthroline-based PNP-cobalt(I) complex

A Co(I) catalyst bearing a phenanthroline-based PNP ligand
(2,9-bis((diphenylphosphanyl)methyl)-1,10-phenanthroline)
exhibits long-range metal ligand corporation behaviour using
a ligand backbone as a hydrogen reservoir and catalyses
hydrogenolysis of benzyl benzoate derivatives *via* β -C-O
cleavage with atmospheric pressure of H_2 .

As featured in:



See Yumiko Nakajima *et al.*,
Chem. Commun., 2024, **60**, 823.