**Supporting Information**

# Turning Up Chirality: Hydrostatic Pressure Boosts Circularly Polarized Luminescence in Europium Complexes

Ayaka Miyoshi,[a] Hitoha Abe,[b] Honoka Akiyama,[a] Keisuke Yoshida,[a] and Yoshitane Imai*[a]

[a] Graduate School of Science and Engineering, Kindai University
3-4-1 Kowakae, Higashi-Osaka, Osaka 577-8502, Japan.
[b] Department of Applied Chemistry, Faculty of Science and Engineering,
Kindai University, 3-4-1 Kowakae, Higashi-Osaka, Osaka 577-8502, Japan.

Corresponding author email: y-imai@apch.kindai.ac.jp. Experimental procedures and High-pressure CPL and PL measurement system

A high-pressure optical cell PCI-500 system, manufactured by Shin Corporation, was used for experimental purposes (Fig. S1). This high-pressure optical cell system used polycrystalline yttrium aluminium garnet ($Y_3Al_5O_{12}$, YAG) as pressure-resistant optical windows. The PL and CPL spectra were measured using a JASCO (Hachioji, Tokyo, Japan) CPL-300 spectrofluoropolarimeter at a scattering angle of 0°. Excitation was performed with unpolarized monochromatic light (bandwidth = 10 nm) at 25 °C. Emission bandwidth was also 10 nm.

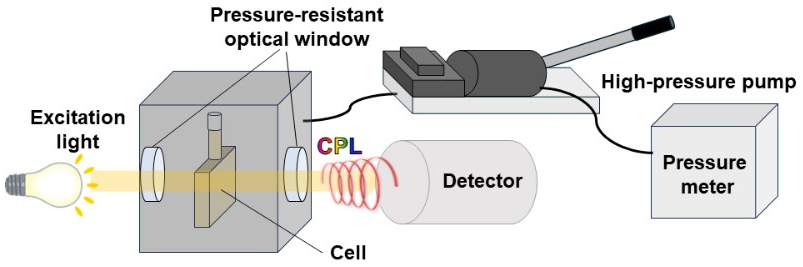


**Fig. S1.** Illustration of the universal high-pressure CPL and PL measurement system.

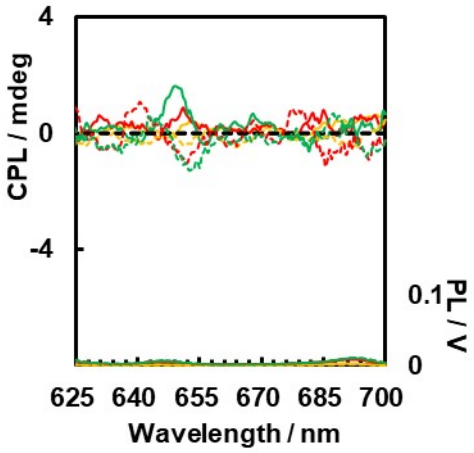

**Fig. S2.** CPL (top) and PL (bottom) spectra of (*R*)-BINAP–Eu(III)(hfa)$_3$ (solid lines) and (*S*)-BINAP–Eu(III)(hfa)$_3$ (dotted lines) in a chloroform solution ($1.0 \times 10^{-3}$ M). Yellow lines: ambient pressure (0.1 MPa); red lines: hydrostatic pressure (50 MPa); green lines: hydrostatic pressure (100 MPa).

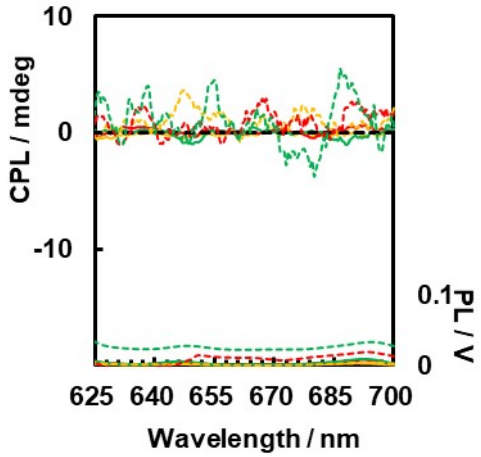


**Fig. S3.** CPL (top) and PL (bottom) spectra of (*R,R*)-QuinoxP–Eu(III)(hfa)$_3$ (solid lines) and (*S,S*)-QuinoxP–Eu(III)(hfa)$_3$ (dotted lines) in a chloroform solution ($1.0 \times 10^{-3}$ M). Yellow lines: ambient pressure (0.1 MPa); red lines: hydrostatic pressure (50 MPa); green lines: hydrostatic pressure (100 MPa).