

[Log in / register](#)

Issue 24, 1985

[Previous](#)[Next](#)

From the journal:

**Journal of the Chemical Society, Chemical Communications**

## Unusual group 14 metal thiolates and sulphides derived from tris(trimethylsilyl)methanethiol; X-ray structures of [Pb(NR<sub>2</sub>)(μ-SCR<sub>3</sub>)<sub>2</sub>] and *cis*-[Ge(CH<sub>2</sub>Ph)(NR<sub>2</sub>)(μ-S)]<sub>2</sub>, (R = SiMe<sub>3</sub>)

[Peter B. Hitchcock](#), [Hatam A. Jasim](#), [Rosemary E. Kelly](#) and [Michael F. Lappert](#)

### Abstract

The reaction of tris(trimethylsilyl)methanethiol, HSCR<sub>3</sub> (R = SiMe<sub>3</sub>), with a group 14†; metal(II) bis(trimethylsilyl)amide, M(NR<sub>2</sub>)<sub>2</sub> (M = Ge or Pb), gives unexpected products: *cis*- and *trans*-[Ge(CH<sub>2</sub>Ph)(NR<sub>2</sub>)(μ-S)]<sub>2</sub> [a rare example of a group 14 cyclodi(metalthiane), {MXX(μ-S)}<sub>2</sub>, by refluxing in PhMe]; [Pb(SCR<sub>3</sub>)(μ-SCR<sub>3</sub>)<sub>2</sub>] (the new ligand SCR<sub>3</sub> evidently can function in both a terminal and a bridging fashion); and [Pb(NR<sub>2</sub>)(μ-SCR<sub>3</sub>)<sub>2</sub>], the first simple prochiral group 14 metal(II) complex.

[About](#)[Cited by](#)[Related](#)

### Buy this article

£42.50\*

\* Exclusive of taxes

This article contains 3 page(s)

### Other ways to access this content

#### Log in

Using your institution credentials

---

### Sign in

With your membership or subscriber account

---

#### Article type:

Paper

#### DOI:

10.1039/C39850001776

#### Citation:

*J. Chem. Soc., Chem. Commun.*, 1985, 1776-1778

BibTex



Go

[Request permissions](#)

#### Search articles by author

- Peter B. Hitchcock
- Hatam A. Jasim
- Rosemary E. Kelly
- Michael F. Lappert

Go

---

Spotlight

Advertisements



---

Journals, books & databases

---



- Home
- About us
- Membership & professional community
- Campaigning & outreach
- Journals, books & databases
- Resources & tools
- News & events
- Locations & contacts

Careers

Awards & funding

Advertise

Help & legal

Privacy policy

Terms & conditions



© Royal Society of Chemistry 2019

Registered charity number: 207890