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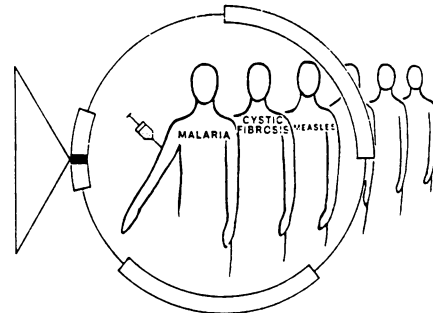
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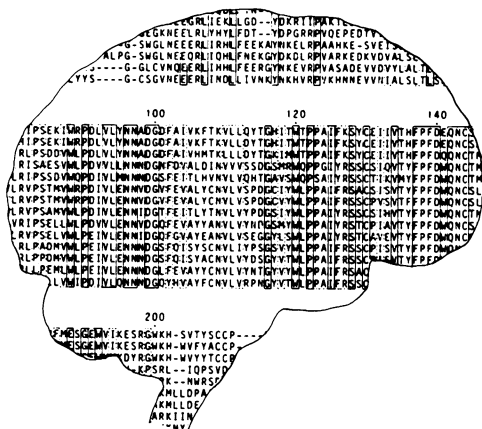
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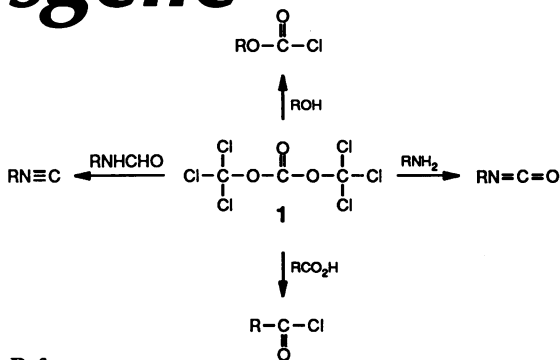
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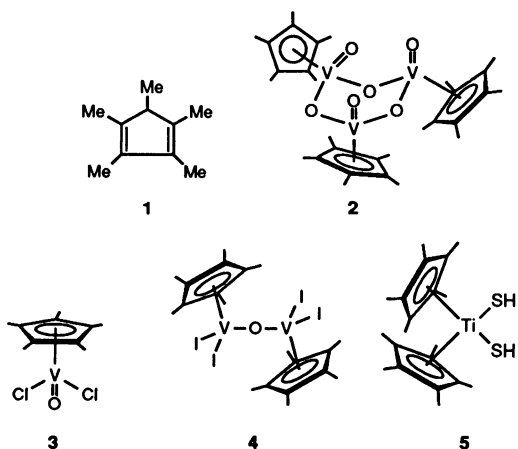


References:

- 1) Eckert, H.; Forster, B. *Angew. Chem.* **1987**, *99*, 922 (*Angew. Chem., Int. Ed. Engl.* **1987**, *26*, 894).
- 2) Eckert, H. Ger. Offen. DE 3 440 141, 1986; *Chem. Abstr.* **1987**, *106*, 4294d.

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References:

- 1) Bottomley, F.; Sutin, L. *Chem. Commun.* **1987**, 1111.
- 2) Bottomley, F. *et al. Organometallics* **1986**, *5*, 2165.
- 3) Bottomley, F. *et al. ibid.* **1986**, *5*, 1620.
- 4) Zou, C.; Wrighton, M.S.; Blaha, J.P. *ibid.* **1987**, *6*, 1452.
- 5) Morrow, J. *et al. ibid.* **1987**, *6*, 2605.
- 6) Beachley, O.T.; Hallock, R.B. *ibid.* **1987**, *6*, 170.
- 7) Albers, M.O. *et al. ibid.* **1986**, *5*, 2321.
- 8) Lin, Z.; Marks, T. *J. Am. Chem. Soc.* **1987**, *109*, 7979.

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