

-

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- 1. (1) – 2,5 .
- 2. (2) . 1990
- 3. .
- 3. () .



- 1.
- 2.
- 3.
 - 3.1.
 - 3.2.
 - 3.3.
 - 3.4.
- 4.
- 5.
- 6.



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Si— . (

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Si,

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• 1.

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• 1) "

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Si;

• 2)

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$\text{Si}_n\text{H}_{2n+2}$,

$n < 10.$

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Si

SiH₄,

Si

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• (CH₃)₂Si Cl -

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• CF₃CH₂CH₂SiCl₃ -

3,3,3-

▪

- (\quad)
- $R_nSiH_{4-n};$
- CH_3SiH_3 $(-C_3H_7)_2SiH_2$
- ;
-
- $(RO)_nSiX_{4-n}$
- $(C_2H_5O)_2SiCl_2$;
- $R_nSi(NR'_2)_{4-n};$
- $R_nSi(OH)_{4-n}.$

•)
e

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Si:

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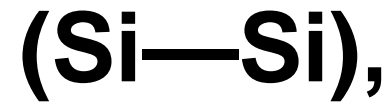
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• 2.



Si



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• 3.



Si (1,74)



d-



• \cdot Si

• Si (0,133)

• (0,077); Si ()

Si—

Si—Hal, Si—, Si—N, Si—
H, Si-O—H, Si—Si

Si (R_3SiCH_2Cl ,
 $R_3SiCH=CH_2$).

•

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Si—

▪

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- Si— 6 5 310 / ,
- Si—CH₃ 314 / ,
- Si— 2 5 260 / ,
- Si— - 3 7 239 / ,
- Si— - 4 9 218 / .

3.1.



Si

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Si—H, Si—Si -

▪

3.2.

(

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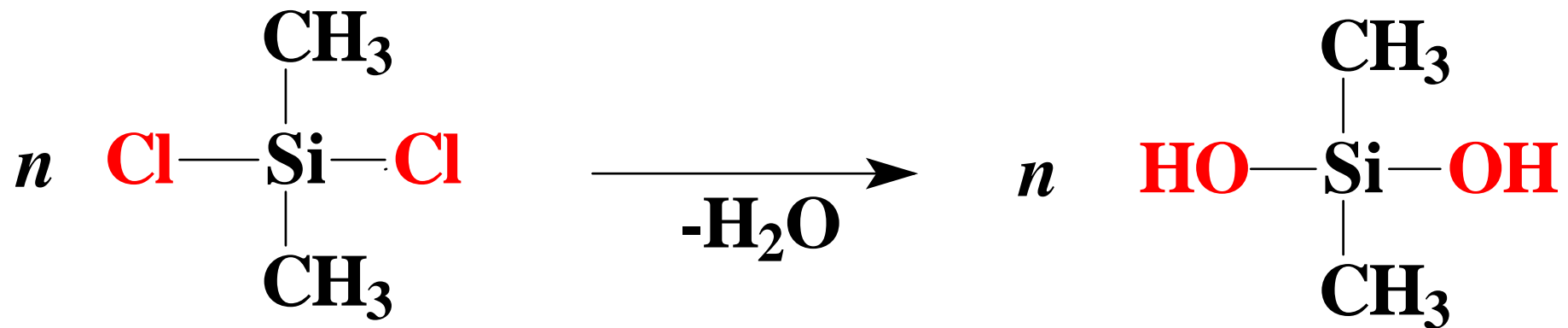
Si

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$\text{X} = \text{I}, \text{OR}', \text{OCOR}', \text{NR}'_2, \text{SR}' \dots$



pH

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Si,

-

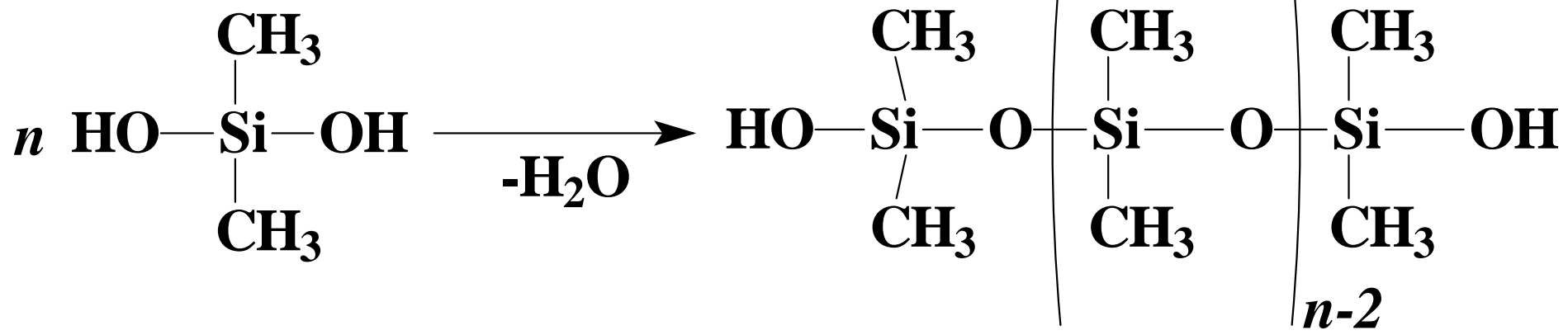
X=Cl, OCH₃, OCOCH₃, NR₂, SR

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$n=3-250$ -

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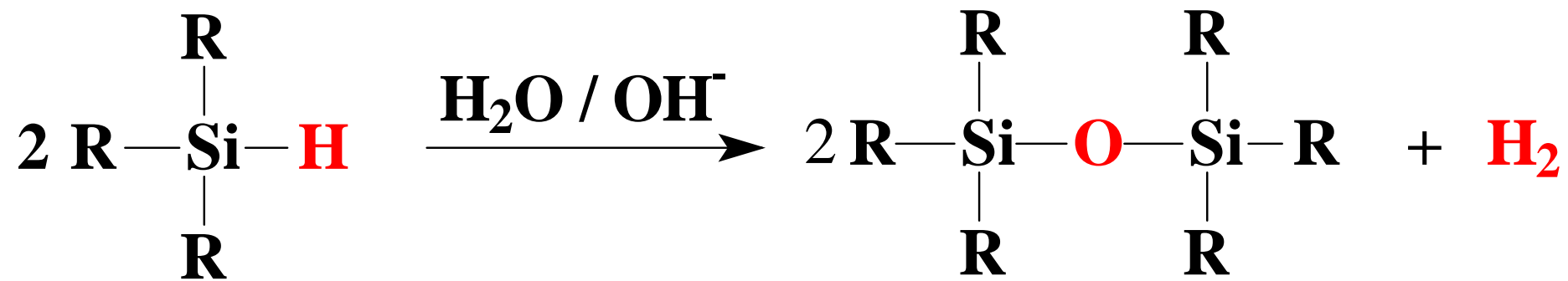
”

■

Si—H, Si—Si

■

■



Si

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3.3.

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▪

(CH₃)₃Si-

(CH₃)₃SiX,

X= Cl, N(C₂H₅)₂,

▪

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3.4.

Si

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SiO₂.

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Si

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" (

H₂SO₄

HNO₃)

"

"

(

Na₂O₂

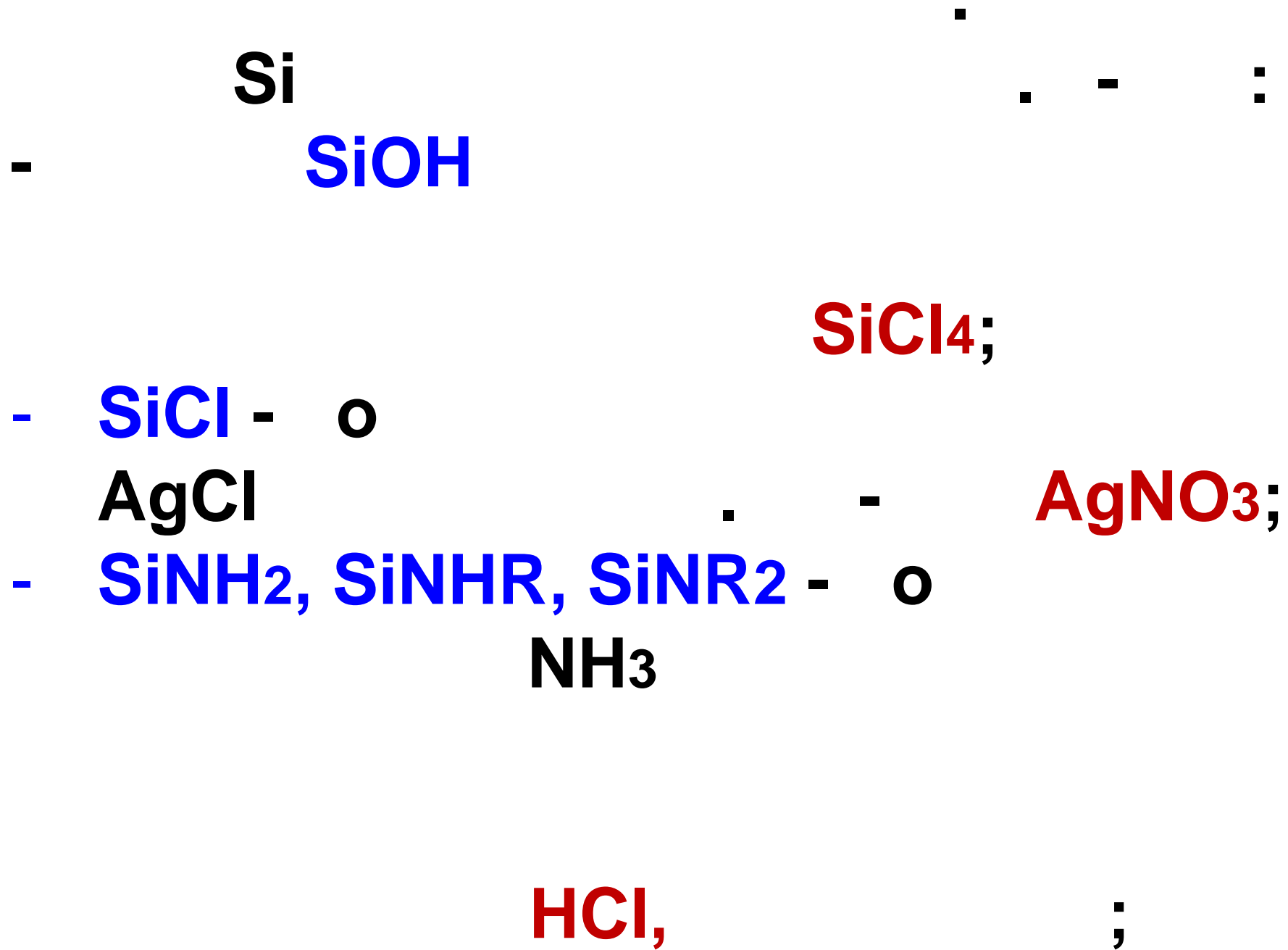
). Si

SiO₂

-

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SiH - O

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(II)

2

NaOH/

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Si—Si

2

NaOH/

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(400°);

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5.

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3)

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1)

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300°),

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2.

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2000),

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(400°),

300°

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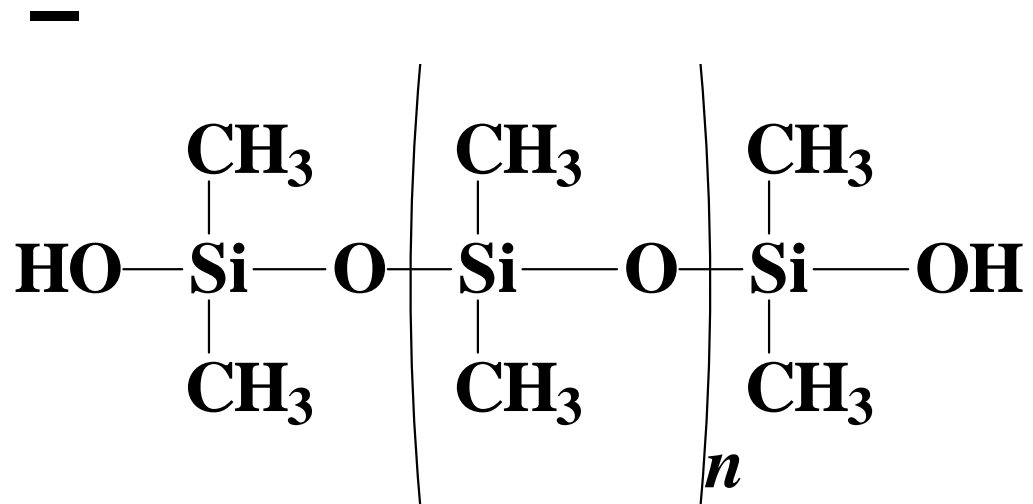
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3.



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SiO₂

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6.

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