



Reaction with Liquid Ammonia

Nurture: Course on Inorganic Chemistry for Class 11

Per week test / Quiz

→ daily home work
→ example more
→ speed
→ AMA sessions
→ Quiz.
→ Less interaction
→ Practice
→ Notes →
→ Quick Revi

2 June

$xy-1$

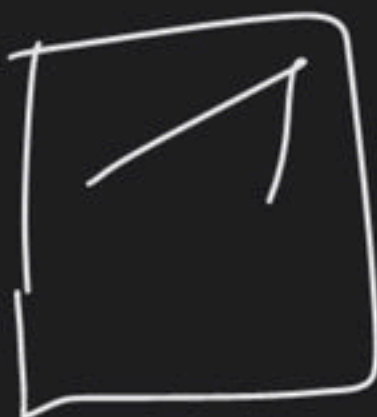


$\{x-2$



$je \pm$

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← AIR — 1 notes

— DRP topic

— sheet

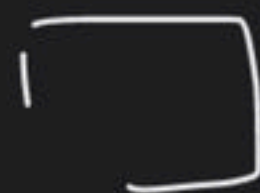
theory



→ AIR

→ DPP

→ sheet



pyq

session

d.n → 27 May

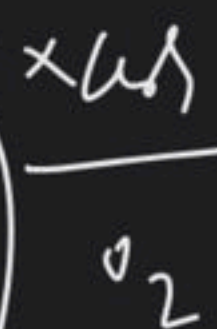
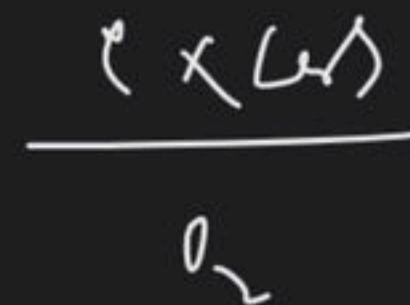
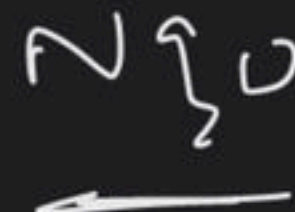
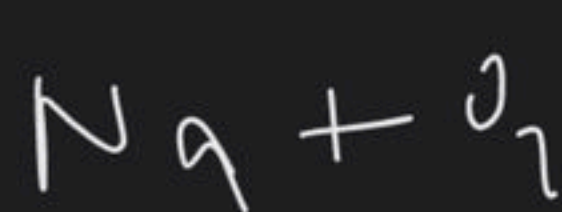
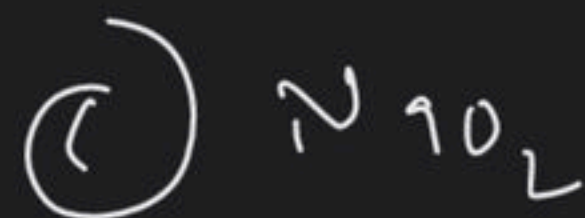
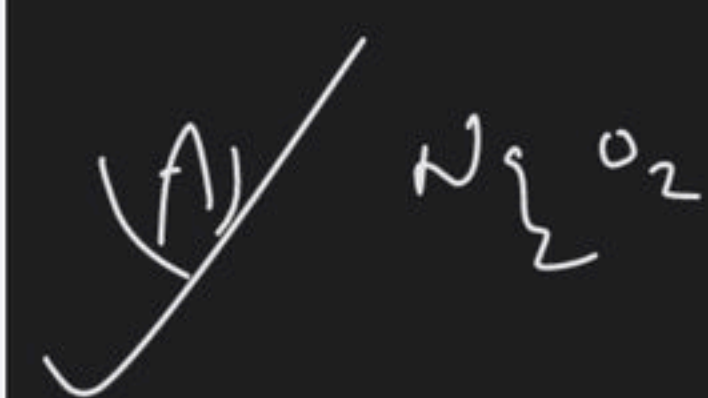
2 → P.P

S-Block

S-Block

JEE 2009

The compound(s) formed upon combustion of Na metal in excess air is/are



Ques NaH is an example

2011

JEE F. Mains

(1) metallic hydride
(d-f block)

(2)

Saline hydride



S-Block

(3) molecular
hydride
(p-block)

(4) Electrophilic hydride

one

The metal that forms nitride by reacting directly with N_2 of air is

2019
JEE mains

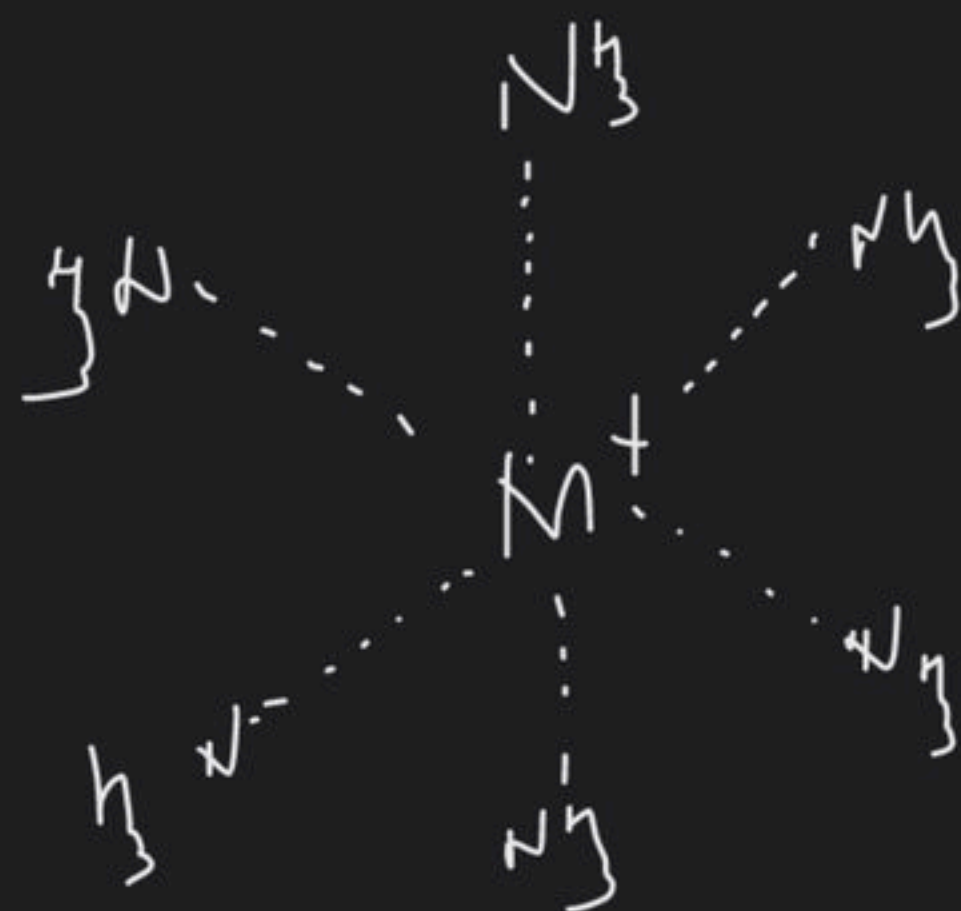
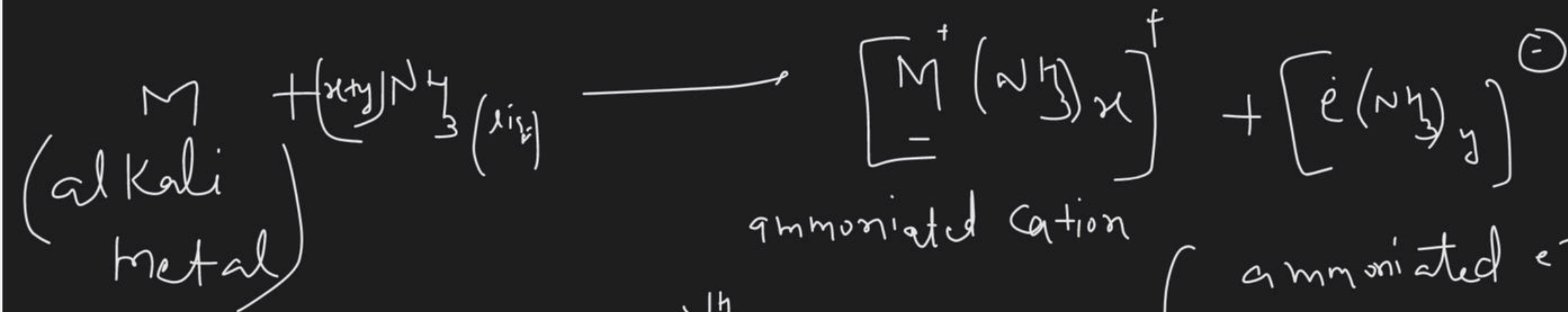
~~①~~ ① (Li)

② Cs

③ Rb

④ K

Reaction with liq. NH_3



ammoniated e^-
paramagnetic solution

Blue colour

Conductor

S.R.A

Ques Sodium metal on dissolution in liq. NH_3 gives
a deep blue solution due to the formation of

☒ (G) solvated electrons

(b) sodamide

(C) sodium-ion
ammonia complex

(A) Sodium-ammonia complex

and JEE Advanced

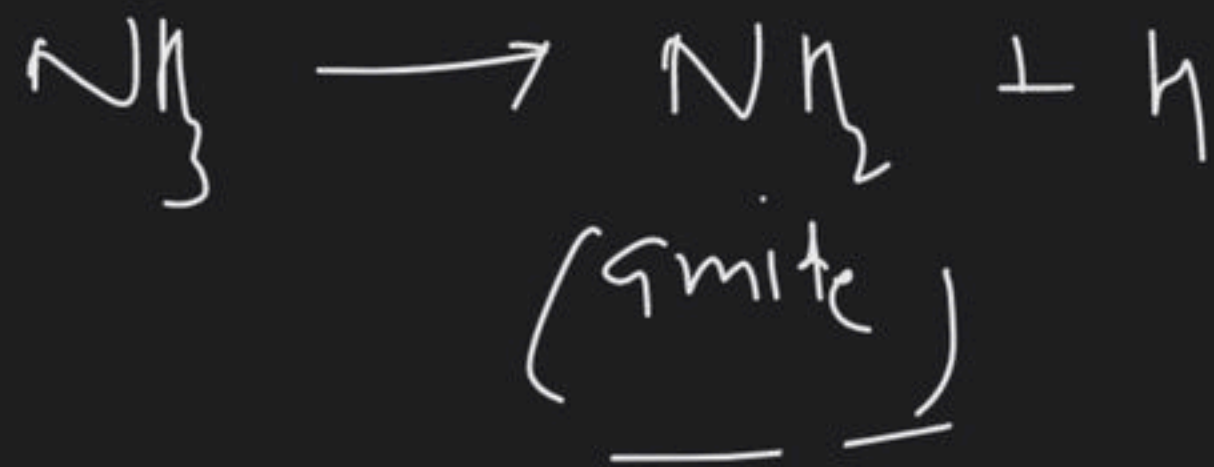
Highly pure dilute
liq. NH_3

solution of sodium in

- ✓ ~~(a)~~ shows blue color
- (c) Produce sodium amide

- ✓ ~~(b)~~ exhibits electrical conductivity
- (d) Produce hydrogen gas

On standing this solution liberated H_2 and became
amide solution



Fe Zn Pt [catalytic impurities]

if catalytic impurities are absent then solution
become stable.

S-Block \rightarrow all element can form such

type of solution with liq. NH₃

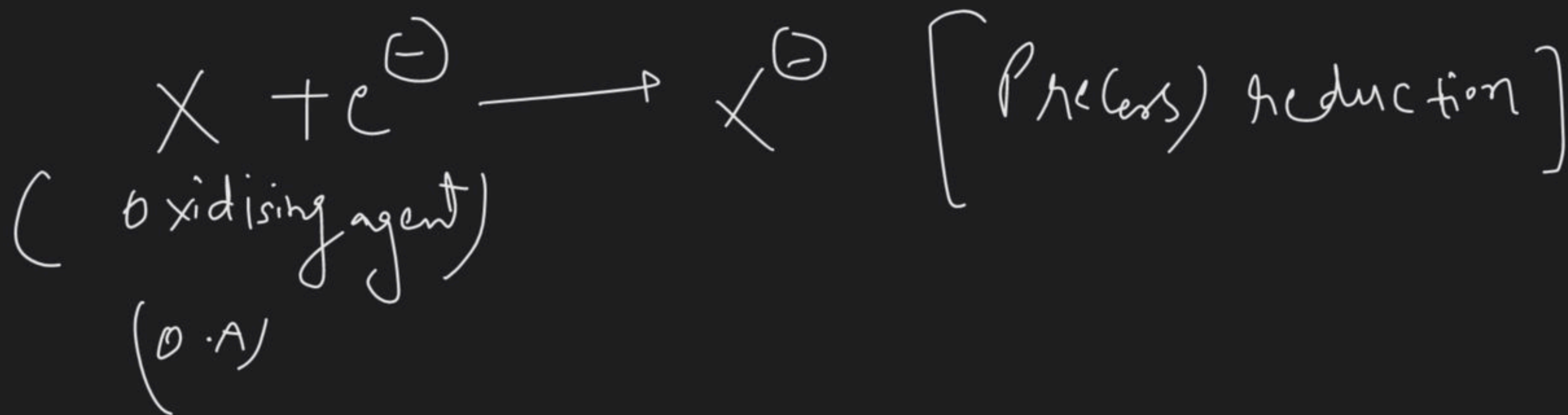
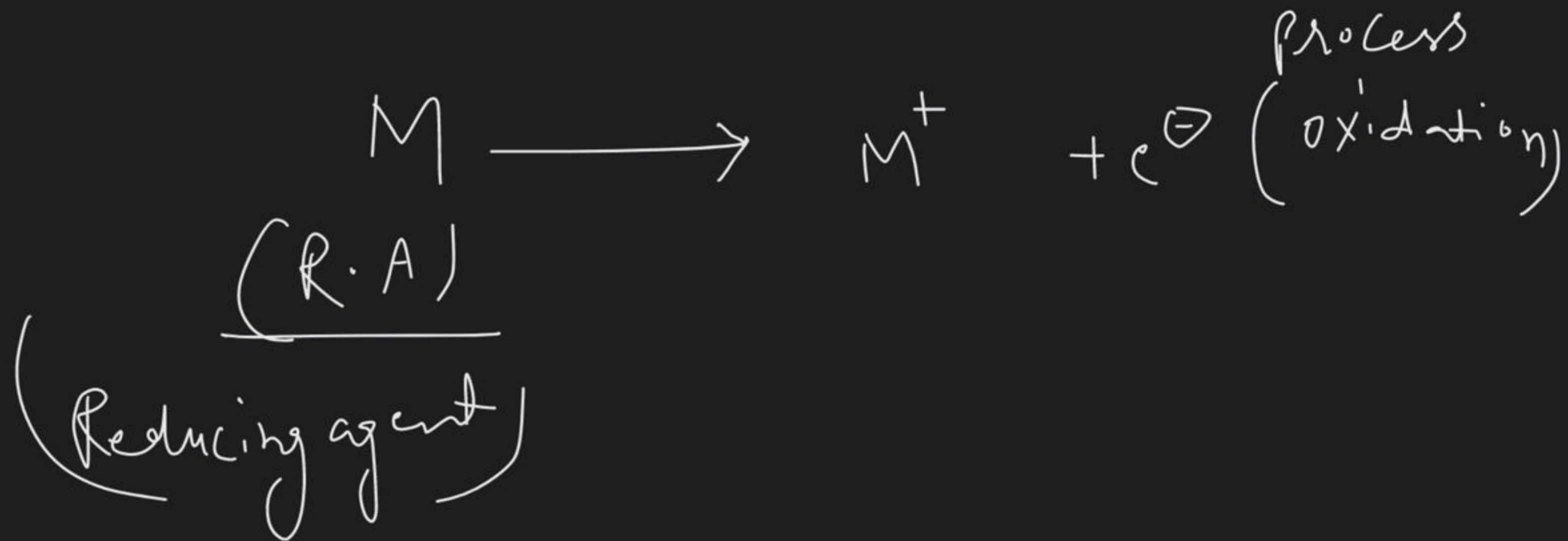
but

Be and

Mg

\rightarrow can not \rightarrow due to

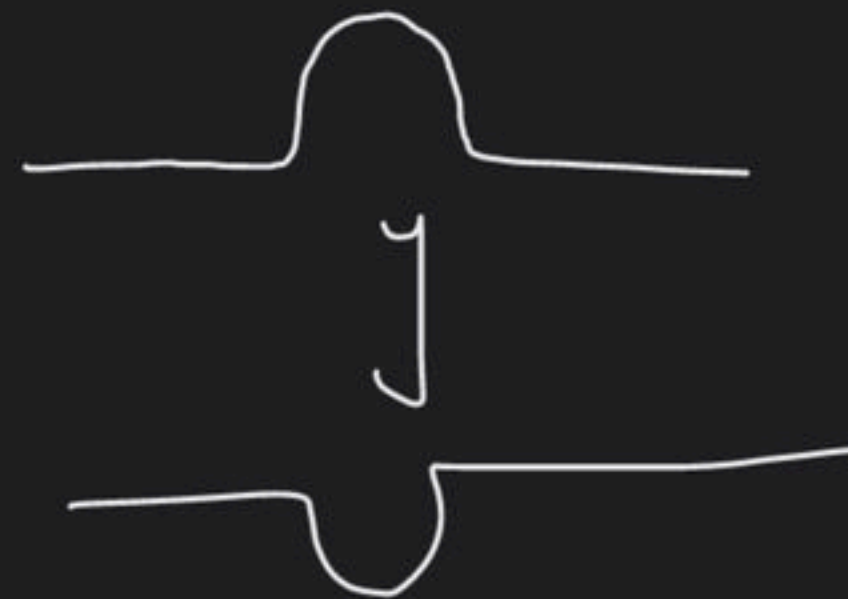
their high I.E





X = Paramagnetic

Species which have unpaired e^-
are called paramagnetic



Diamagnetic

species which does not
have unpaired e^-

Diamagnetic