

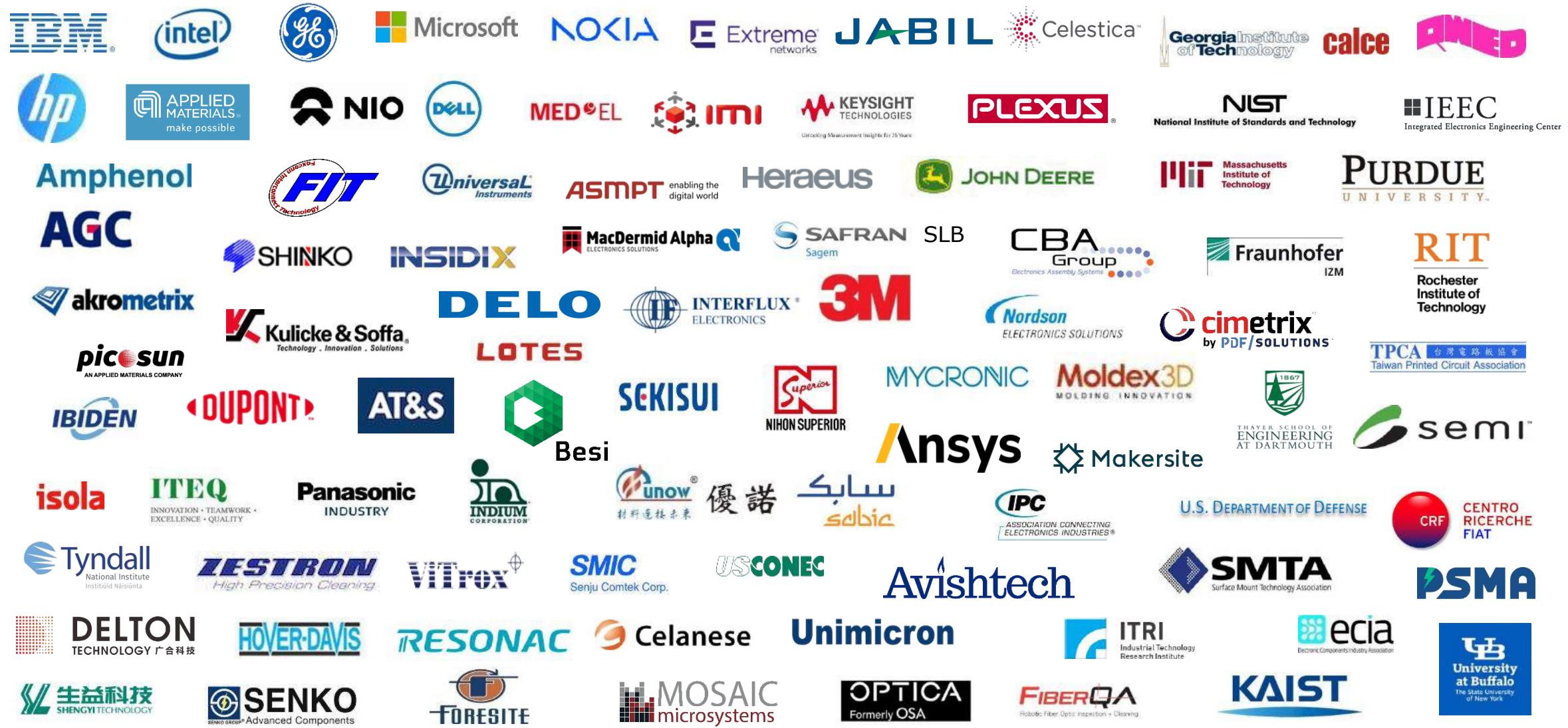
锡铋合金电迁移的研究 Electromigration in SnBi Solder Joints

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International Electronic Manufacturing Initiative 国际电子生产商联盟

Industry-led Global Consortium for Electronics Manufacturing 行业主导的全球电子制造技术合作联盟

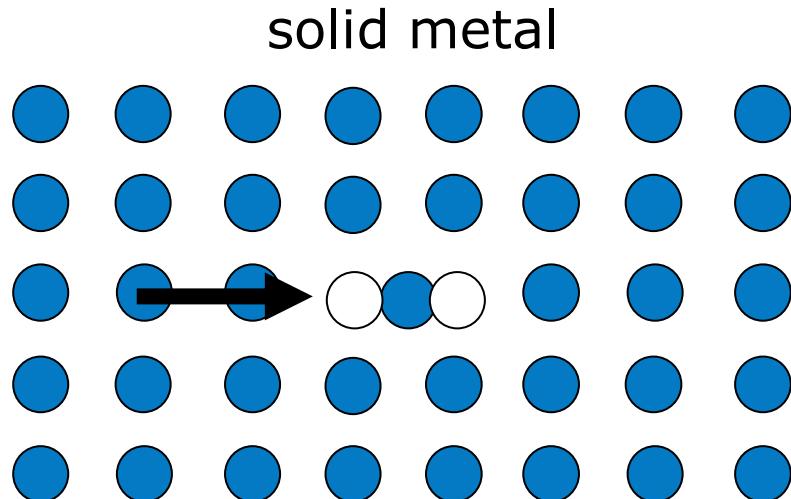


电迁移与电化学迁移

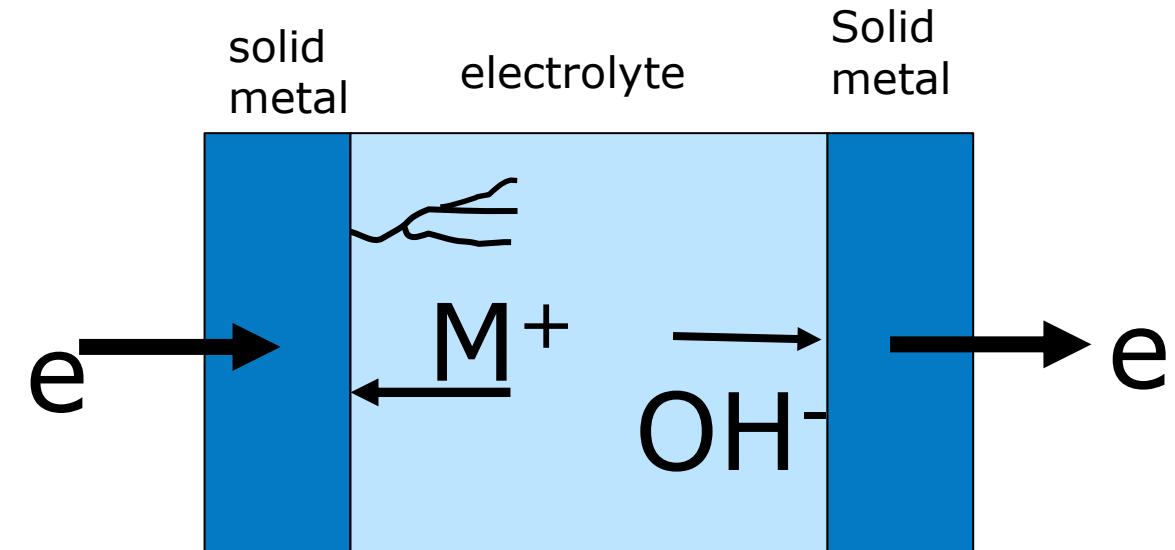
Electromigration and Electrochemical migration

- 电迁移是由于电子流的动量转移而导致金属原子沿电子流方向迁移。
- 电化学迁移是电解质中离子在电场影响下的运动。
- Electromigration is the biased diffusion of atoms in a metal due to momentum transfer from flowing electron.
- Electrochemical migration is motion of ions in electrolytes under the influence of electric field.

ELECTROMIGRATION



ELECTROCHEMICAL MIGRATION

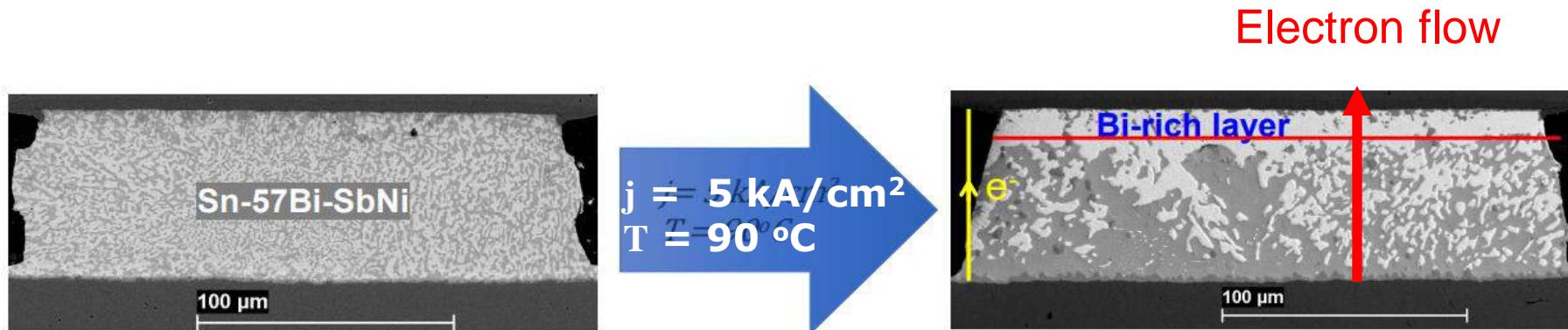


锡铋电迁移的例子 Example of Sn-Bi electromigration

Growth of Bi layer in current stressed solder joints

Sitaram Panta, Javier Flores, Faramarz Hadian, Eric Cotts

07/14/2022



锡铋共晶结构中，富铋是明亮的，富锡是暗的。

In the Sn-Bi eutectic structure, Bi-rich phase is bright, and the Sn-rich phase is dark.