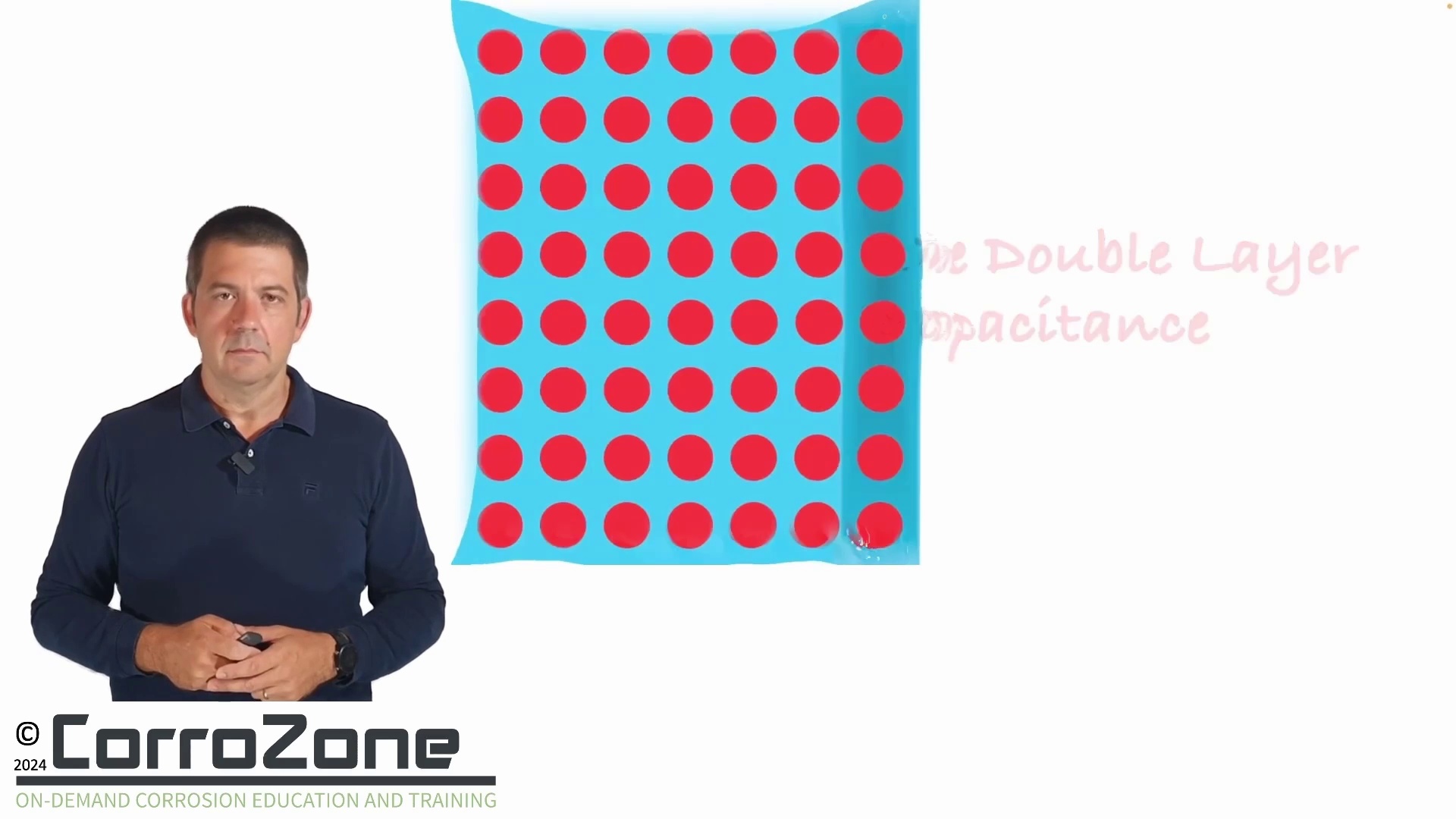
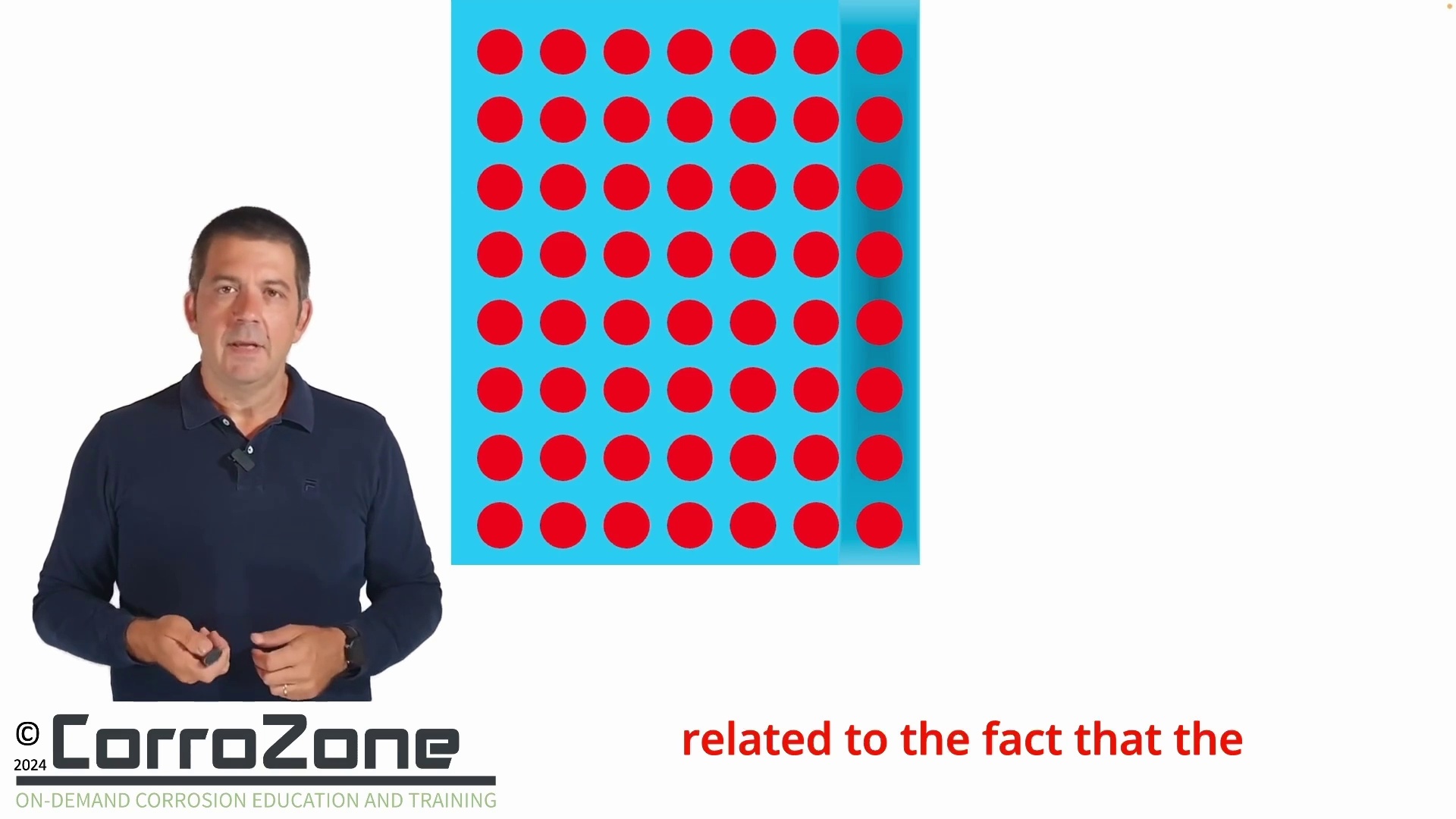
# Slide-by-Slide Revision Summaries

## Slide 1



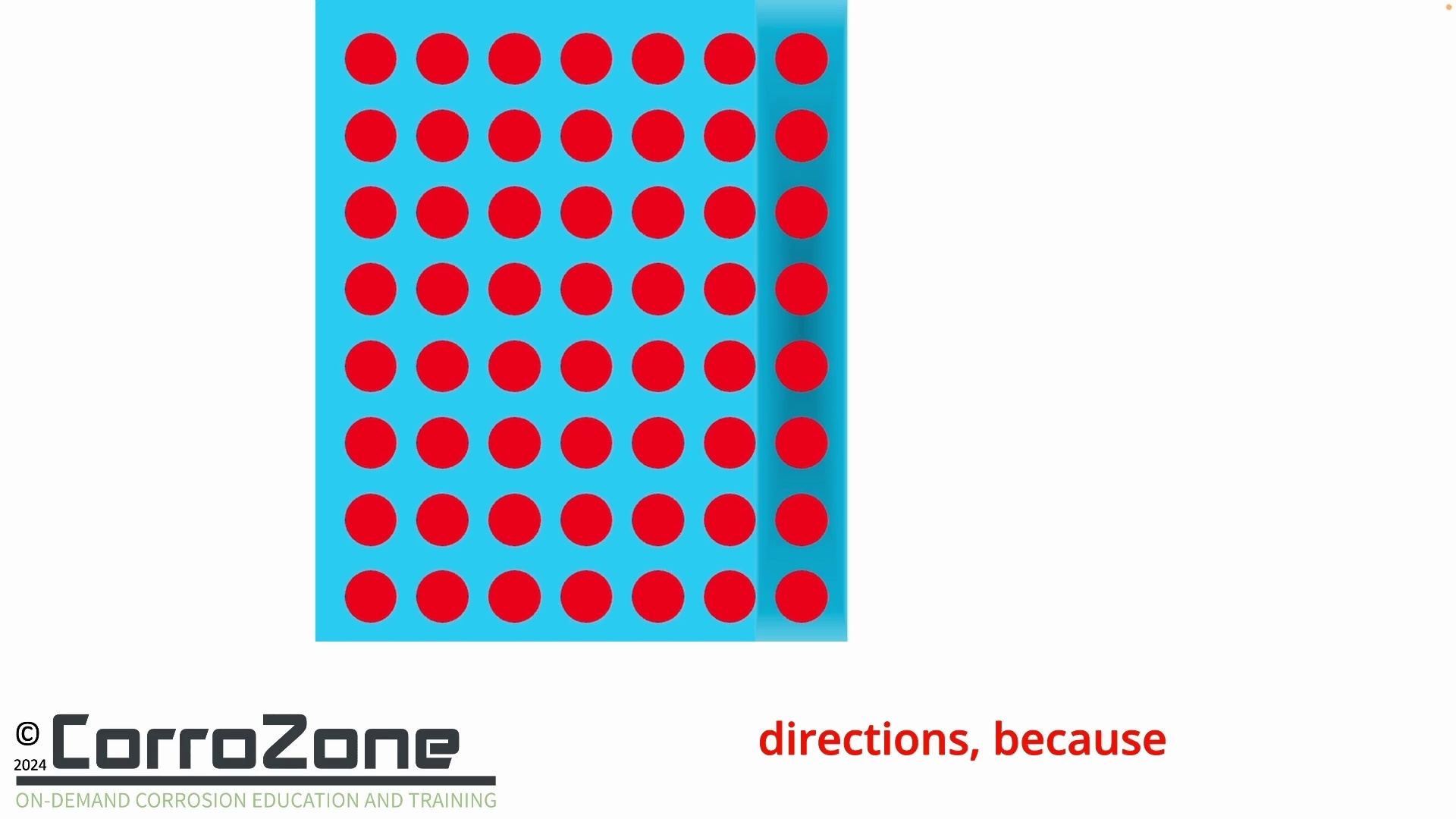
* The electrical double layer at the electrode interface creates a capacitance.
* This capacitance has a major impact on the system's overall impedance response.
* The effect arises from the redistribution of electrical charge near the metal surface.

## Slide 2



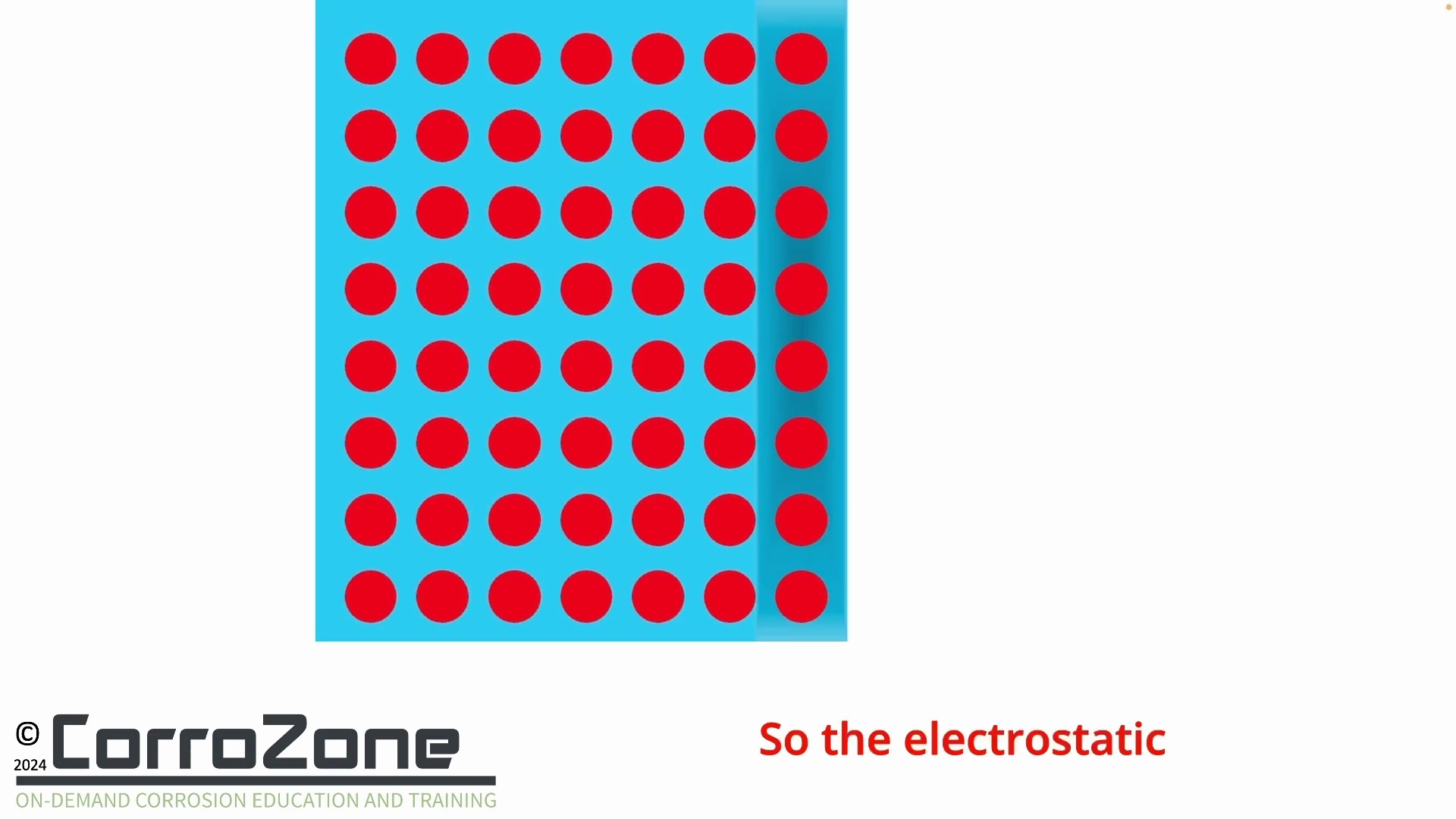
* Metal atoms deep within the material are surrounded by a completely symmetrical electron cloud.
* This isotropic electron distribution results from the uniform crystal lattice structure in all directions.

## Slide 3



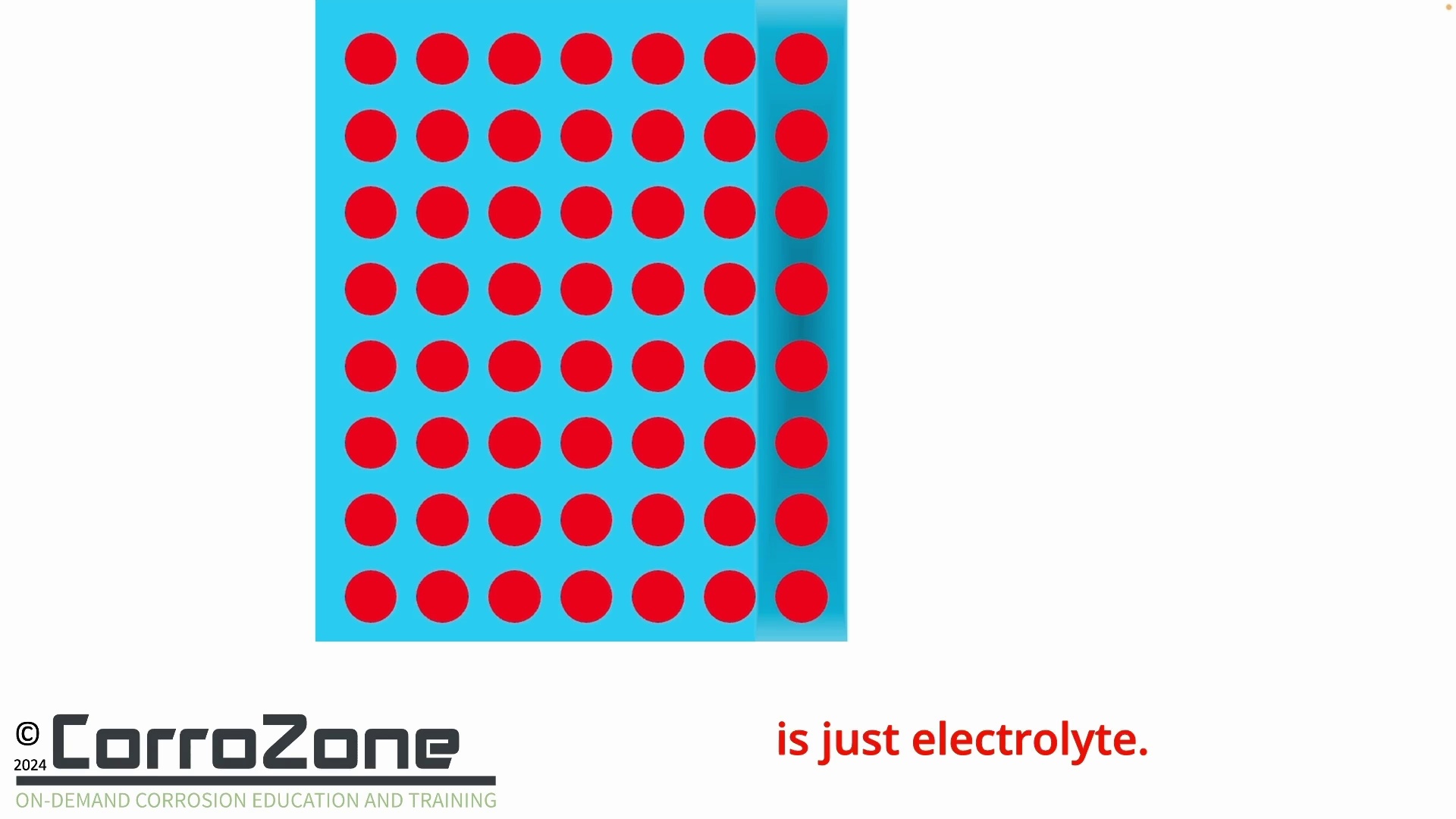
* No key concepts available; the slide contains no content.

## Slide 4



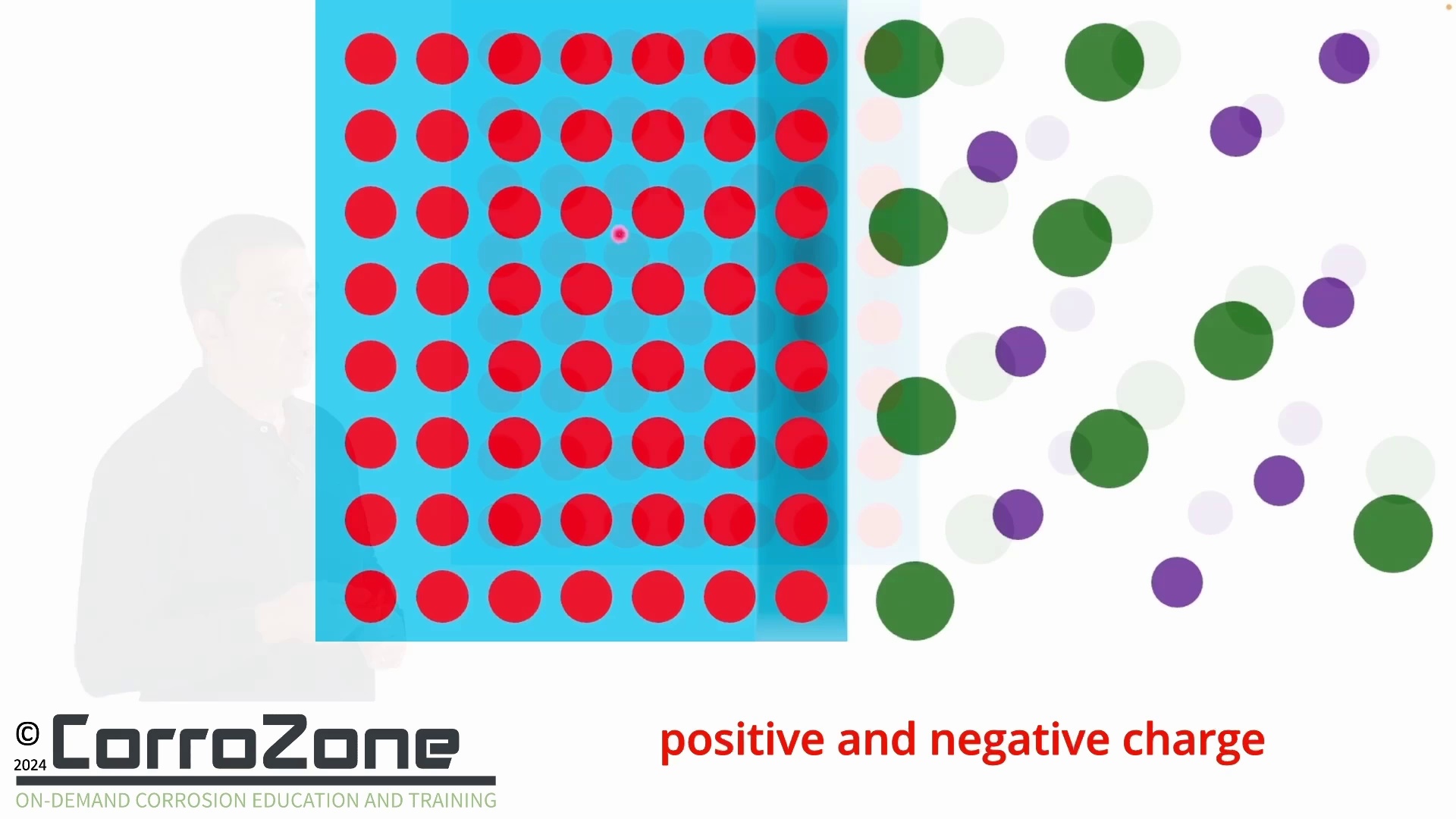
* Atoms far from the surface experience balanced electrostatic forces.
* Electrostatic interactions become negligible at large distances from the surface.

## Slide 5



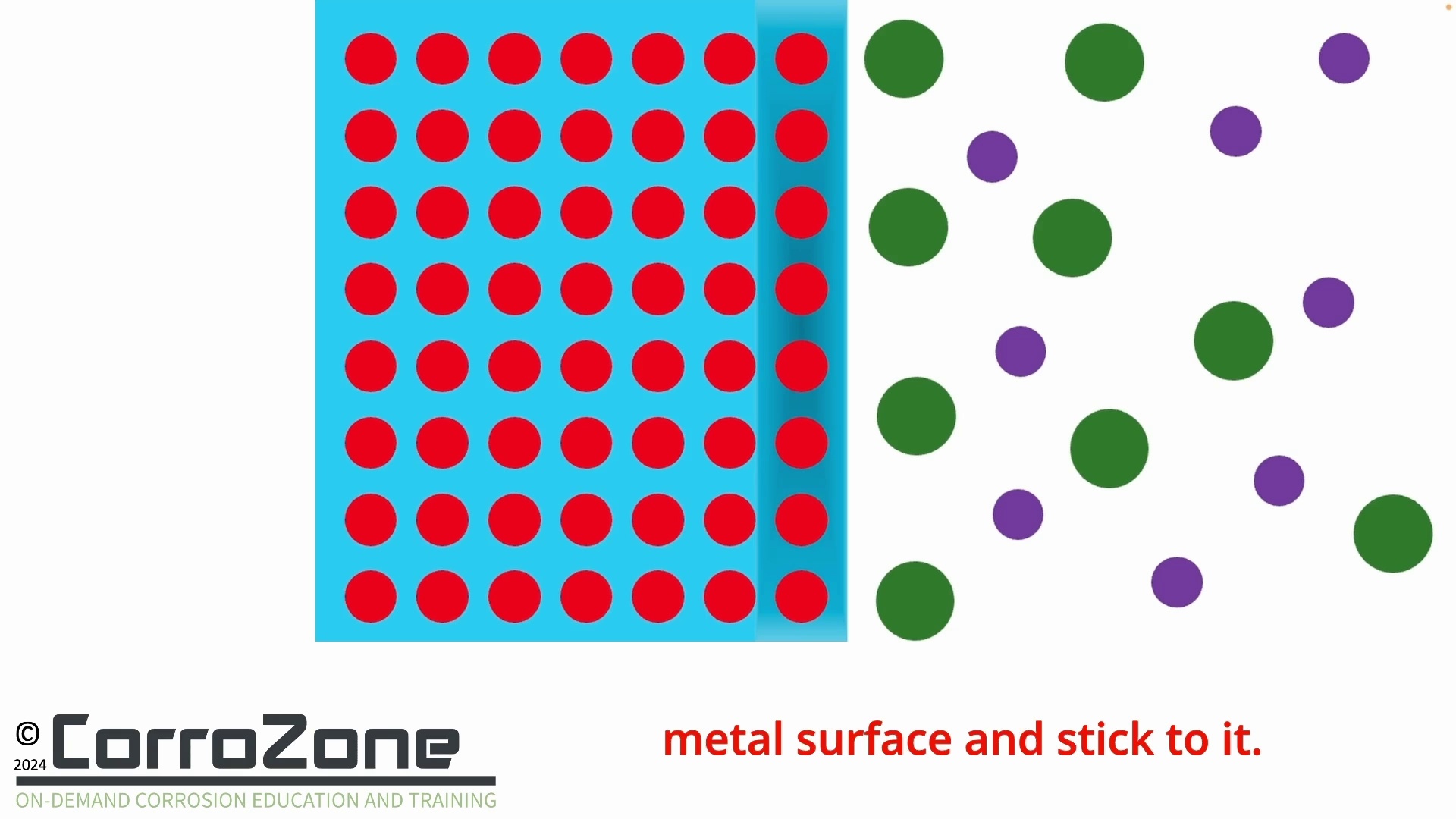
* Surface metal atoms have an asymmetric environment compared to bulk atoms.
* One side of surface atoms is bonded to the crystal lattice, while the other side faces the electrolyte.
* This unique positioning affects their chemical and physical properties.

## Slide 6



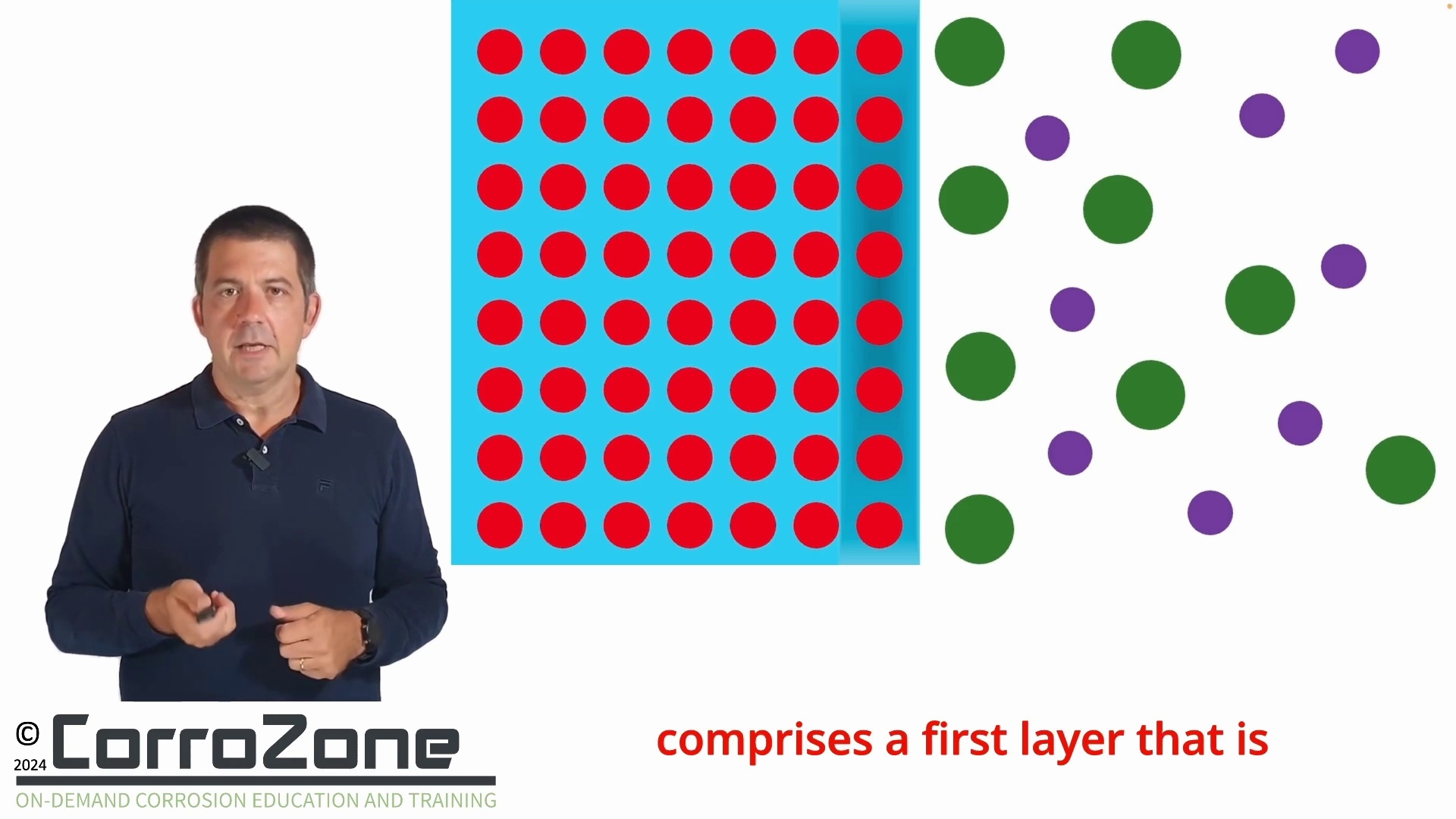
* Charge redistribution occurs at the metal-electrolyte boundary.
* Positive and negative charges accumulate on opposite sides of the interface.

## Slide 7



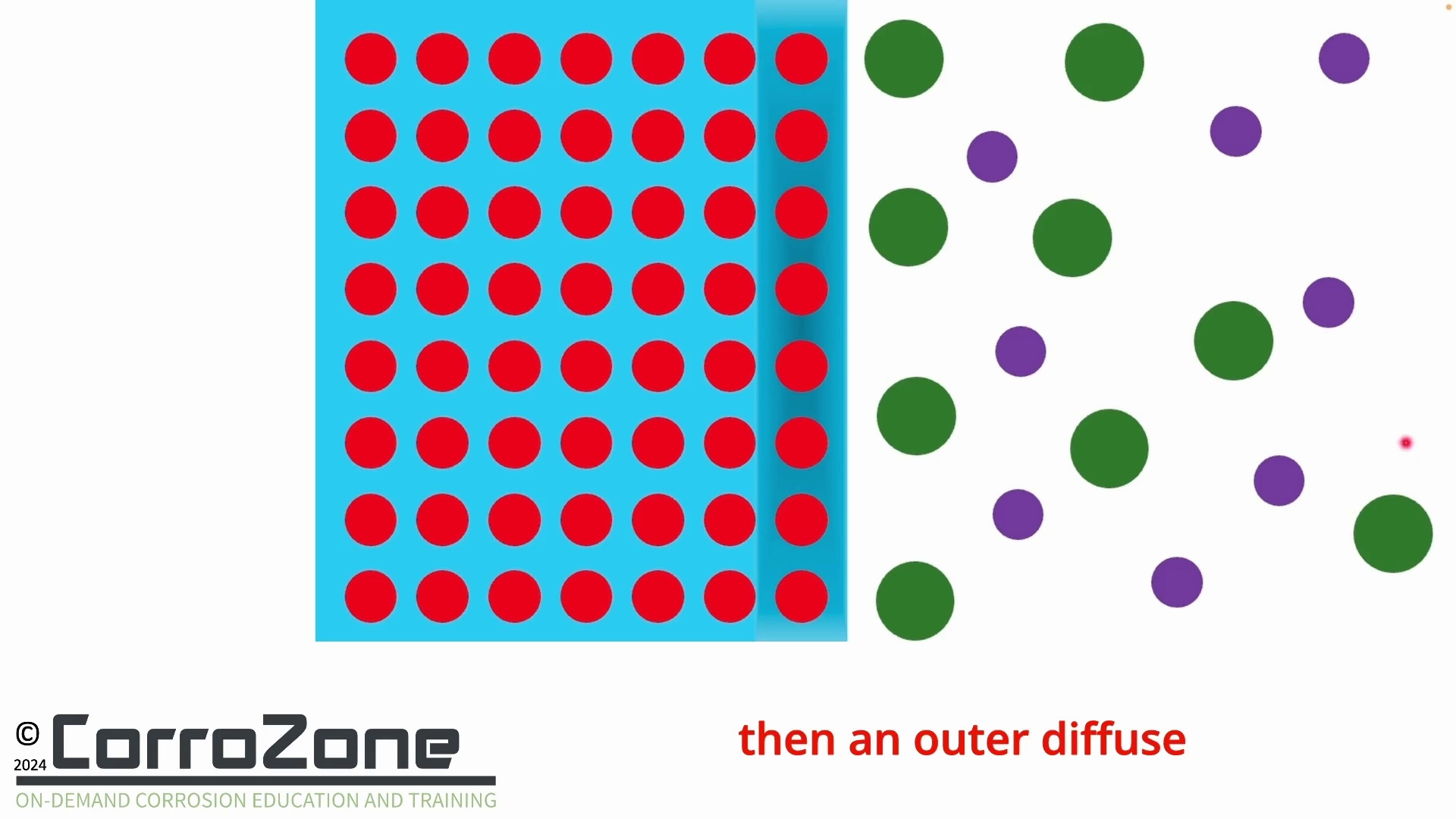
* Some ions in the electrolyte tend to adsorb onto the metal surface.
* These adsorbed ions can remain attached to the metal.

## Slide 8



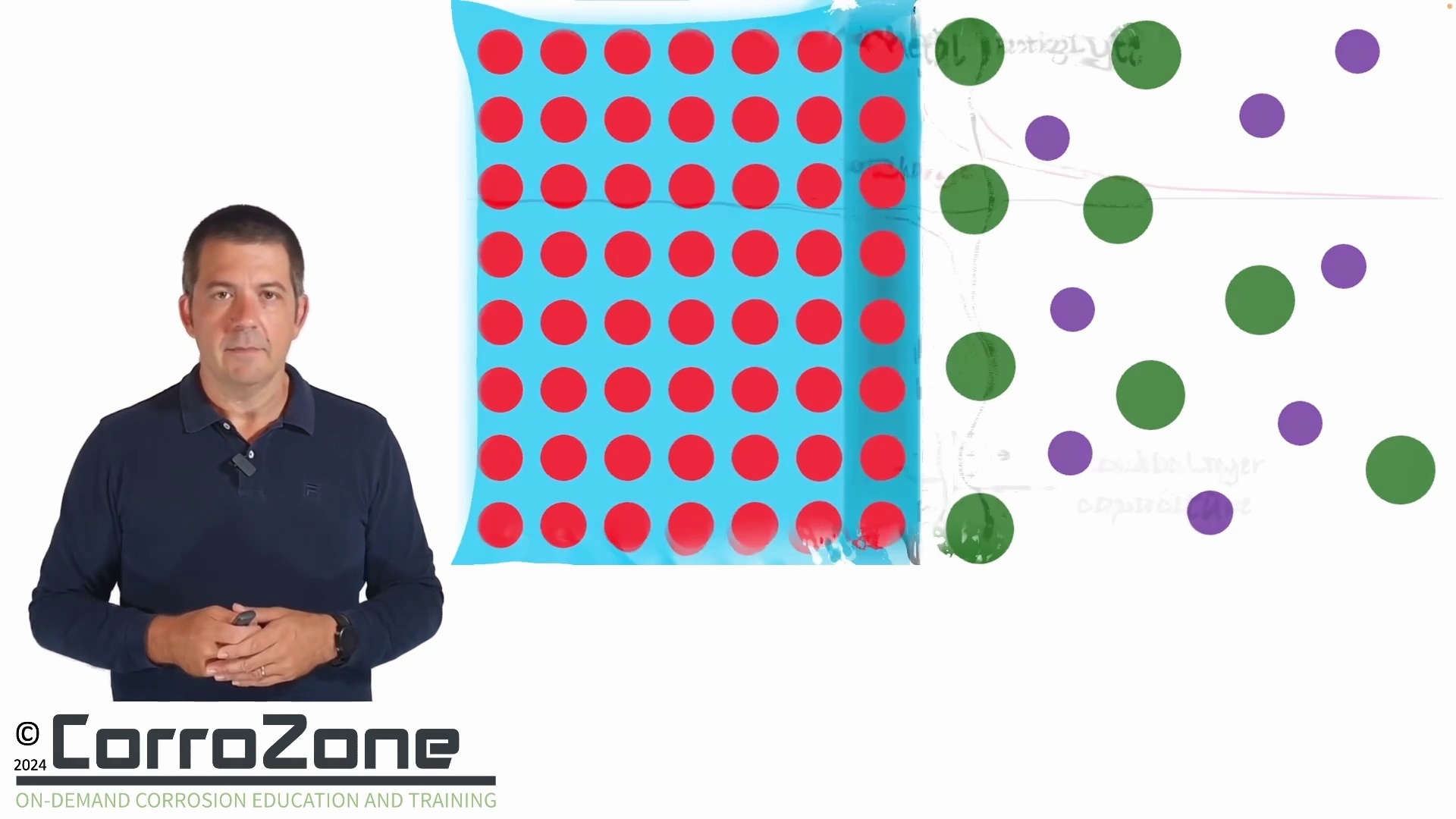
* The electrical double layer forms at the interface between a metal surface and an electrolyte.
* It consists of a primary layer of specifically adsorbed ions directly on the metal surface.
* A secondary layer of less tightly bound, solvated ions follows the primary layer.
* An outer diffuse layer extends beyond these, where the charge concentration gradually decreases with distance from the metal.

## Slide 9



* No information is available on this slide to summarize.

## Slide 10



* No information was provided on this slide.