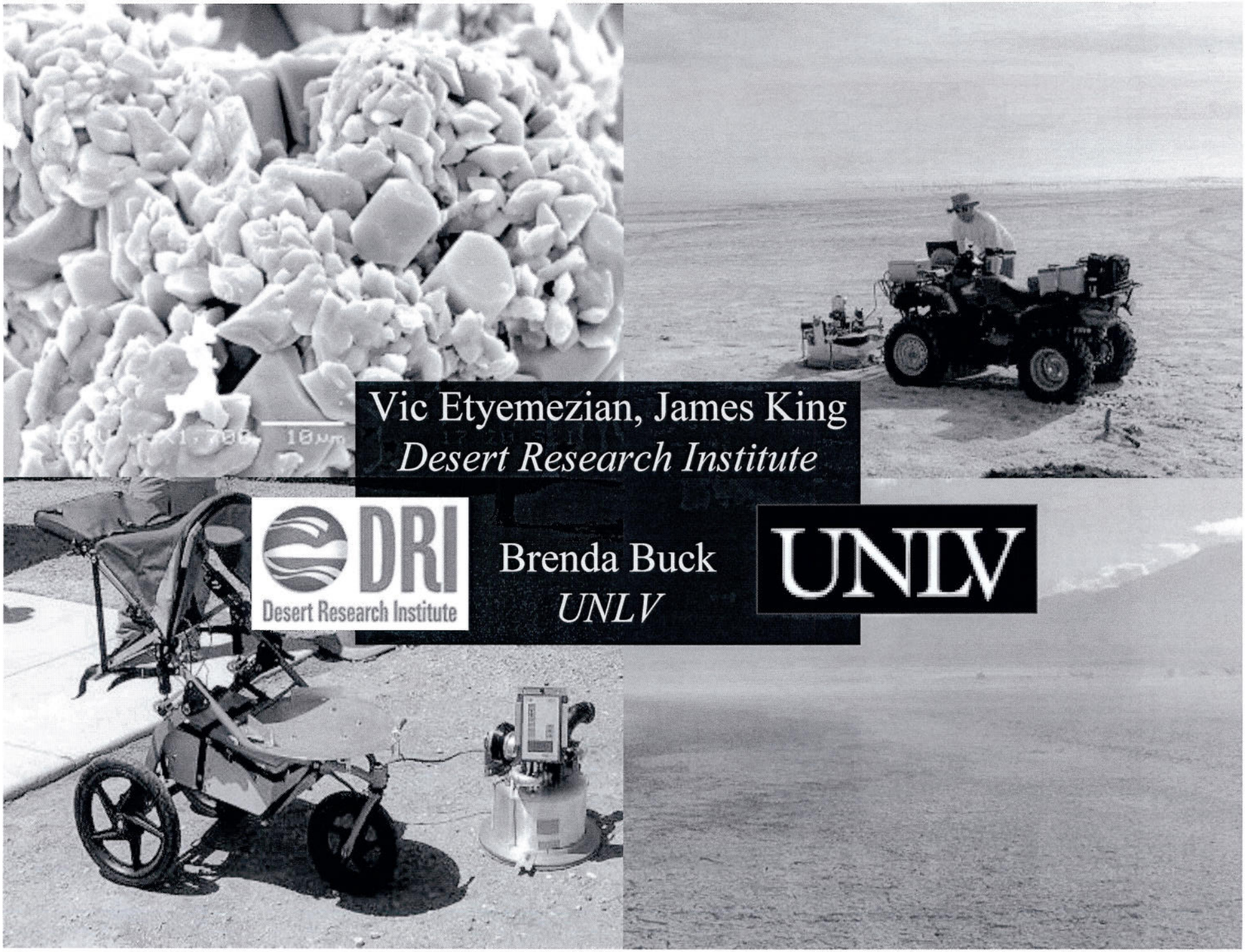
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Summary of Scoping Task

- Genesis of friable crusts seems to be determined by the presence of water and the cycle of hydration/dehydration
- Shallow slopes and areas close to the shoreline are consistently subject to partial wetting and drying resulting in friable salt crust development over large areas
- Northern and southern halves of the Salton Sea are associated with Mg and Ca based salts, respectively

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Considerations for Future Efforts

- Why do the same minerals crystallize in different formations (habits)?
  - Wetting/drying cycles
  - Rate of shoreline retreat
  - Ion concentration, organic matter content, moisture
- What fraction of time are potentially friable crusts emissive?
  - Climatology – moisture, temperature, sunlight
  - Spatial distribution
  - Wind
- Are crust properties temporary or permanent?
  - Does prolonged drying cement/loosen initial crust properties?

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Proposed Additional Research

- Re-visit sites sampled in 2007
  - PI-SWERL & Soil Sampling in Feb. 2008
  - Laboratory Analysis – EC, pH, MC, XRD, SEM
- Additional at-a-site PI-SWERL testing
  - Spatial variability: Emission potential profile perpendicular to shoreline
  - Temporal variability: Emission potential throughout the year

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Proposed Additional Research

- Dust contributions to ambient PM
  - Prelim data suggest shoreline-based emissions have differences in speciation than other soil sources
  - Salt abundances around shoreline/agricultural field?
- Northern vs. Southern emissions
  - Prelim data suggest higher Fe content & smaller PM10 mass to abundance of elements in the south
- Air Toxics
  - Se, Cr, Pb were detected in pilot study
  - XRF was used, ICP-MS needed for accuracy